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U.S. Department of the Interior
Bureau of Land Management
Vale District Office

Malheur and Jordan Resource Areas

April 2001

Proposed Southeastern Oregon Resource Management Plan
and
Final Environmental Impact Statement

Volume 2 (of 3) – Appendices

2002-026237/NF

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As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/PL-01/016+1792

Public Disclosure Notice: Comments, including the names and addresses of respondents, will be available for public review at the Bureau of Land Management office address listed on the front cover of this document, during regular business hours, Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment(s). Such requests will be honored to the extent allowed by law and recent court decisions. All submissions from organizations, businesses, or individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

I

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II

Abbreviations and Acronyms

***Reader note:** Refer to the list below for abbreviations or acronyms that may have been used in this chapter.*

ACEC – area of critical environmental concern
ADC – animal damage control
AML – appropriate management level
AMP – allotment management plan
AMR – appropriate management response
APHIS – Agricultural Plant and Animal Health Inspection Service
ARA – Andrews Resource Area
ATV – all-terrain vehicle
AUM – animal unit month
BA – biological assessment
BIA – Bureau of Indian Affairs
BLM – Bureau of Land Management
BMP – best management practice
BO – biological opinion
BOM – Bureau of Mines
BOR – Bureau of Reclamation
BPA – Bonneville Power Administration
CERCLIS – comprehensive environmental response, Compensation and Liability Information System
CEQ – Council on Environmental Quality
CFR – "Code of Federal Regulations"
CLCAS – "Canada Lynx Conservation Assessment and Strategy"
CRMP – "Cultural Resources Management Plan"
CWA – "Clean Water Act"
DLCD – Department of Land Conservation and Development
DOD – Department of Defense
DOE – Department of Energy
DOGAMI – Oregon Department of Geology and Mineral Industries
DOI – Department of the Interior
DPC – desired plant community
DRFC – desired range of future conditions
EA – environmental assessment
EIS – environmental impact statement
EPA – Environmental Protection Agency
ER – entrenchment ratio
ERMA – extensive recreation management area ERU – ecological reporting unit
ESA – "Endangered Species Act"
ESI – ecological site inventory
E/EIS – "Eastside Environmental Impact Statement"
FAA – Federal Aviation Administration
FERC – Federal Energy Regulatory Commission
FLPMA – "Federal Land Policy and Management Act"
FMP – fire management plan
FWFMP – "Federal Wildland Fire Management Policy"
GIS – geographic information system
GMA – geographic management area
GTR – green tree replacement
HA – herd area
HMA – herd management area
HMP – habitat management plan
HUC – hydrologic unit code
ICBEMP – Interior Columbia Basin Ecosystem Management Project
IMP – "Interim Management Policy"
IMPLWR – "Interim Management Policy for Land under Wilderness Review"
INFISH – "Inland Native Fish Strategy"
JRA – Jordan Resource Area
KGRA – known geothermic resource area
LCDC – Land Conservation and Development Commission
LGMP – "Leslie Gulch ACEC Management Plan"
MFP – management framework plan
MOU – memorandum of understanding
MRA – Malheur Resource Area
NCA – national conservation area
NEPA – "National Environmental Policy Act"
NHOT – National Historic Oregon Trail
NHPA – "National Historic Preservation Act"
NL – no leasing
NOAA – National Oceanographic and Atmospheric Administration
NPS – National Park Service
NPSP – nonpoint source pollution
NRCS – Natural Resources Conservation Service
NRHP – National Register of Historic Places
NSO – no surface occupancy
NWSR – national wild and scenic river
NWSRA – "National Wild and Scenic River Act"
NWSRS – National Wild and Scenic River System
OAR – "Oregon Administrative Rules"
OBSMP – "Oregon's Bighorn Sheep Management Plan"
ODA – Oregon Department of Agriculture
ODEQ – Oregon Department of Environmental Quality
ODF – Oregon Department of Forestry
ODFW – Oregon Department of Fish and Wildlife
ODOT – Oregon Department of Transportation
ODPR – Oregon Department of Parks and Recreation
ODSL – Oregon Division of State Lands
OHV – off-highway vehicle
ONA – outstanding natural area
ONHP – Oregon Natural Heritage Program
ONHTMP – "Vale District Oregon National Historic Trail Management Plan"
ORS – "Oregon Revised Statute"
ORV – outstandingly remarkable value
OWFEIS – "Oregon Wilderness Final Environmental Impact Statement"
OWS – occupancy with stipalations
PFC – proper functioning condition
PILT – payments in lieu of taxes
PNC – potential natural community
PP&L – Pacific Power and Light
PSEORMP/FEIS – "Proposed Southeastern Oregon Resource Management Plan/ Final Environmental Impact Statement"
PRIA – "Public Rangelands Improvement Act"
PUC – Public Utilities Commission
RAIDS – riparian aquatic information data system
RAWS – remote automated weather station
RCA – riparian conservation area
RMO – riparian management objective
RMP – resource management plan
RNA – research natural area
ROD – record of decision
ROS – recreation opportunity spectrum
RPS – rangeland program summary
RS – "Revised Statutes"
R&PP – recreation and public purpose
SCORP – Oregon's "Statewide Comprehensive Outdoor Recreation Plan"
SEORAC – Southeastern Oregon Resource Advisory Council
SEORMP – "Southeastern Oregon Resource Management Plan"
SHPO – State Historic Preservation Office
SMA – special management area
SMCMPA – Steens Mountain Cooperative Management and Protective Area
SRMA – special recreation management area
SRP – special recreation permit
S&G's – "Standards of Rangeland Health and Guidelines for Livestock Grazing Management"
TGA – "The Taylor Grazing Act"
TMDL – total maximum daily load
TNC – The Nature Conservancy
TNR – temporary nonrenewable grazing
T&E – threatened and endangered
USDA – U.S. Department of Agriculture
USDI – U.S. Department of the Interior
USFS – U.S. Forest Service
USFWS – U.S. Fish and Wildlife Service
USGS – U.S. Geological Survey
VRM – visual resource management
WAFWA – Western Association of Fish and Wildlife Agencies
WFSA – wildland fire situation analysis
WRCS – "Western Regional Corridor Study"
WSA – wilderness study area
WSRO – "Wilderness Study Report, Oregon"
WQMP – "Water Quality Management Plan"
WQRP – water quality restoration plan

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Appendices

Major Changes from Draft SEORMP/EIS

Appendix D. Water Resources and Riparian/Wetland Areas

1) The Riparian Management Objective section, now Appendix D3, was edited to reflect those objectives listed in the 1996 "Inland Native Fish Strategy" (INFISH).

2) The riparian trends for stream segments tables, now Table D5-1, was updated to reflect data gathered from 1996–1999.

3) The Total Maximum Daily Load section was changed to the Water Quality Restoration Plan heading to reflect new U.S. Forest Service (USFS) and BLM policy; and incorporated total maximum daily loads (TMDL's) and water quality management plans (WQMP's) into water quality restoration plan (WQRP) concepts. This appendix is Appendix D6 in the final.

Appendix E. Allotment Summaries

1) Base data identifying vegetation condition and trend and PFC by pasture was added to the allotment summaries.

2) Pastures were listed in allotment summaries with acreage, percent public land, and pasture management objectives.

Appendix F. Wildlife Habitat Descriptions and Considerations

1) Changes were made to add wildlife desired range of future conditions (DRFC's), and to include additional information concerning management of sage grouse habitat.

Appendix G. Projected Recreation Use Patterns

1) This appendix was dropped in the final.

Appendix O. Best Management Practices

1) Edited narrative to reflect comments and moved Wildlife Habitat and Protection section to Appendix F.

Appendix T. Livestock Exclusion Areas

1) Created to clarify reference to exclusion areas in Chapter 2 and to track management of parcels with resources potentially impacted by livestock through the alternatives (this appendix contains excluded and not allocated areas).

Appendix R. Effect of Intensity and Season of Grazing

1) Revised to include additional citations of grazing impacts to vegetation resources.

Appendix T. Catlow Conservation Agreement

1) This appendix was dropped in the final.

Appendix U. Potential and Existing Recreation Sites

1) Edited to include all those recreation sites described in text of the Draft SEORMP/EIS.

Appendix W. Monitoring

1) This appendix was added to the final in response to public comment.

Appendix A

Scoping Comments

Introduction

During public scoping for this plan, written comments were received from 22 individuals and 16 agencies or groups. Oral comments were received at a series of public meetings held in the Vale and Burns Districts, and in Bend, Portland, and Boise. Many comments from the varied individuals and groups gave similar information or proposed similar ideas. Similar ideas and information were consolidated into a single comment. Some of the input is more specifically mentioned and considered within the range of alternatives. The Steens Mountain and Andrews planning efforts will go through a similar scoping process. Those identified for Andrews have been left in place and will be referenced as this new effort begins.

Riparian

1) Minimize fencing in riparian zones; use riders to keep cattle out of sensitive areas.
2) Management of riparian areas should continue in order to enhance aquatic habitats for threatened, endangered, and sensitive species.
3) Need more rock check dams in smaller streams to stop erosion and enhance fish and wildlife habitat.
4) Riparian areas should be restored as quickly as possible.
5) Severe restrictions, changes in grazing practices, or elimination of grazing in riparian areas is appropriate; if grazing occurs, it is not preferable in the growing season.
6) How will riparian areas be managed to prevent the future listing of sensitive native fish stocks (such as redband trout, bull trout, sculpin, chub, etc.)?
7) Develop riparian areas along Jackass Creek, such as water seep on Davies acreage.
8) Monitor streams and ground water for water quality and quantity.
9) Use improvement of water quality as a criteria for developing management strategies.
10) Consider locating livestock exclusion areas in riparian habitat.

Recreation

1) Develop one or two additional primitive campgrounds (except do need to include outhouses).
2) Do not improve existing roads or river access, beyond present conditions; provide only minimum maintenance to accommodate 4-wheel drive access only.
3) No new roads, trails, or river access points (on the Owyhee) should be constructed.

4) Do not allow cross-country vehicle travel. Restrict off-road vehicles to existing roads only.

5) Consider impacts of off-highway vehicle (OHV) use and recreation facilities on the proper functioning of ecosystems.

6) Identify areas for motorized versus nonmotorized based recreation.

7) Do not close existing roads and 4-wheel drive trails; the land needs to be open to everyone, not just a few.

8) Limit horse or packstring use for recreation.

9) Manage for recreation because it provides a high return to local communities; the value of places like Steens Mountain, Jordan Craters, and the Owyhee and Malheur Rivers for tourism is much greater than for cattle or timber.

10) Do not designate any more national wild and scenic rivers (NWSR's).

11) Keep recreation at its present levels; there are plenty of opportunities for people now.

12) Do not promote tourism by people from outside the region.

13) Consult with the National Park Service concerning any rivers identified as eligible for the national wild and scenic rivers system (NWSRS).

14) Local governments should decide if recreation access should be improved and if more campgrounds should be developed, not BLM.

15) Maximum protection and enhancement of natural resources should guide the management of the Steens Mountain Recreation Lands.

16) Cattle should not be allowed to graze on the Steens Mountain Recreation Area.

17) The current Federal government policy of allowing commodity-oriented uses on Steens Mountain is out of synch with the general public's desires for high-quality recreation.

18) Do not develop any more campgrounds on Steens Mountain; existing facilities are adequate for the size of the area and BLM cannot afford to hire additional maintenance personnel.

19) Hiking trails in Little Blitzen and Big Indian Gorges need to be maintained and the brush cleared away.

20) The Loop Road on the Rooster Comb needs to be widened and guard rails installed to improve public safety.

21) Consider multiple use of the Birch Creek property and other similar assets by schools, 4-H clubs, Boy Scouts, renting cabins to the general public, etc.

22) Analyze whether limits should be set on recreational use at high use areas to reduce impacts.

23) Consider fees for all users of public land.

24) How will Hole-in-the-Ground and Birch Creek Ranches be managed and what uses

will be made?

25) Control access off the Steens Loop Road at upper elevations to control recreation use.

26) Provide more rest room facilities at high-volume camping areas such as Anderson Crossing and Frog Springs.

27) Address trespass onto private property, especially backpackers, and address the issues of locked gates, campfires, garbage, impact on livestock distribution (cows leave when people come in on foot).

28) Support NWSR designation for all 36 streams listed in 1996 RMP update.

Forestry and Woodlands

1) Logging should be kept to a minimum; no more clearcuts.

2) The policy of ripping out established western juniper trees to allow forbs to grow is not understood.

3) Need to better understand the cumulative impacts of eradicating western juniper on the total environment and the significance to the western juniper forest ecosystem.

4) Need to analyze the ecological impacts of reducing the number of old, mature western juniper trees on total biological diversity.

5) Need to address how removal of some western juniper stands will affect migratory neotropical birds and other wildlife.

6) Need to determine the impacts of controlling western juniper trees on sensitive bat species.

7) Maintain timber harvest at sustainable levels.

8) Western juniper does not impact site hydrology.

Special Management Areas

1) Analyze wetland areas to determine if they qualify to be designated as special management areas (SMA's).

2) Areas containing special status species should be considered for designation as SMA's.

3) Consider the South Fork of Malheur River below Riverside as an SMA or a Wilderness Study Area (WSA).

4) WSA's have been in effect a long time, stopping the construction of management facilities; the Southeastern Oregon Resource Management Plan/Environmental Impact Statement (SEORMP/EIS) should provide guidelines to allow management of the land for the benefit of users and wildlife.

5) WSA's should be managed to protect wilderness characteristics.

6) Many WSA's are not considered suitable since they have roads and evidence of human use; they should be managed as back country areas; they can be more effectively managed by allowing continued vehicle use; wilderness is only used by people with

horses or a lot of leisure time for backpacking.

7) Concern was expressed over the gradual destruction of WSA and NWSR values as a result of the construction of "improvements"; the "cause" of the impacts should be eliminated instead.

8) Consider private land inholdings in WSA's and other SMA's and place priority for acquisition by the Federal government, including Steens Mountain, the Middle Fork of the Owyhee, and the McClain Cabin site in the Pueblo Mountains WSA.

9) Consider additional areas for areas of critical environmental concern (ACEC's), including the High Steens, Kiger Gorge, Alvord Desert, Jordan Craters, (including land in Idaho, and Wildhorse Canyon).

10) Develop additional ACEC's to protect historic plant harvest areas and cultural areas for Indian tribes.

11) Consider Steens Mountain and entire Owyhee drainage for recommendation to Congress as possible national conservation areas (NCA's).

12) Consider the impact of designating SMA's on local economies.

13) Limit the number of SMA's.

14) Limit grazing in RNA's and ACEC's.

Livestock

1) Promote grazing management that emphasizes natural values over livestock production; severely restrict livestock access to river canyons and other riparian areas.

2) Grazing during winter months would minimize damage to endangered species; but do not allow grazing during the spring or early summer.

3) Recommend no grazing be allowed if BLM does not have the fiscal resources to plan, implement, and monitor any part of the grazing activities outlined in this plan.

4) Consider the effects of livestock grazing and timber harvest on:

    a) animal species that depend on herbaceous vegetation or trees for their habitat and predators that rely on these animals, such as northern goshawk, flammulated owls, loggerhead shrike, deer, and elk;

    b) the number of small replacement conifers which are able to become established and overall health of a forest;

    c) watershed health such as soil compaction, plant litter, infiltration rates, runoff, erosion, and watershed hydrology;

    d) microbiotic crusts;

    e) introduction of new species and altered habitats (plant and animal);

    f) ecological versus livestock objectives on the long-term health of the western juniper ecosystem;

    g) past and present improper livestock grazing and fire suppression and how these problems will be rectified;

h) livestock grazing on riparian areas;

i) stabilizing and restoring soils, particularly on uplands; and

j) vegetation biodiversity.

5) Allotment management plans (AMP's) should be completed on all allotments and livestock permittees should demonstrate a period of compliance with management goals before planning future range projects such as western juniper eradication.

6) This plan should describe stocking levels, season of grazing, grazing systems, and consequences of not meeting resource management objectives.

7) Will this plan consider changes in grazing capacity and if so will animal unit months (AUM's) be reduced? What data would be used to establish grazing capacity "old" or "new."

8) Will forage allocations change between livestock and wildlife?

9) Allocate forage in the following priority order: first threatened and endangered or sensitive species, wildlife, wild horses, with any remaining to domestic livestock.

10) Consider what level of livestock use the rangeland can sustain long term in order to restore and sustain the native community.

11) How will riparian management affect livestock management?

12) What data will be used to measure health of the watershed? Where will data come from?

13) Determine areas suitable for watershed restoration.

14) Discuss what mitigation measures or design modifications should occur, when livestock trespass occurs or if livestock management systems do not work.

15) Do not allow additional fencing on public land to accommodate cattle grazing. Allow current rangeland developments to deteriorate (do not maintain).

16) Plan to reduce cattle AUM's during drought years to ensure adequate forage for wildlife.

17) Present grazing practices should be allowed to continue.

18) Consideration should be given to the control of grasshoppers and Mormon crickets on rangelands.

19) Uncontrolled grazing by wild horses has a very detrimental effect on rangeland; the number of horse herds should be reduced to a number only necessary to preserve history and to accommodate tourism.

20) Herd management plans for wild horses should assure timely gathers to prevent exceeding appropriate management levels (AML's).

21) Wild horses should be controlled and kept to a minimum since they graze public land

year-round.

22) Consider grazing domestic goats to control brush and western juniper.

23) How will new regulations associated with "Rangeland Reform" be incorporated into this plan?

24) Consider criteria and standards for allowing supplemental grazing use.

25) Determine if more flexibility can be built into grazing systems, such as extending or shortening grazing seasons, develop adaptable grazing systems; incorporate written flexibility standards to reflect weather and other factors affecting plant growth.

26) How will this plan affect existing AMP's?

27) Consider consequences of vandalism of range improvements resulting from increased public use and the financial impacts to permittees who bear the cost of maintenance.

28) Analyze BLM's ability to maintain an increasing number of Bureau-initiated projects, such as exclosure fences and guzzlers, before they are proposed.

29) Private water rights issues need to be maintained; need to ensure that water is kept in the local area where it originated? Don't overexpand water distribution systems.

30) Continue development of water sources for livestock and wildlife needs.

31) Recommend appropriate methods for maintaining seeded areas, such as spraying, plowing, etc.

32) Consider how to dispose of old project materials, such as water tanks, troughs, fence wire.

33) Restrict Big Indian and Little Blitzen Gorges and the High Steens from grazing.

34) Consider current ecosystem-based management philosophy when developing vegetation treatment projects.

35) Use pre-European conditions as baseline for management actions.

36) Focus on "health of land"—what land can produce and sustain and also leave some land as "nonmanaged."

37) Focus on restoration of native grasslands.

38) Gather more baseline data on ecological processes such as cryptogamic crusts; use this data to base management decisions on; focus on restoration.

39) Resist grazing in VRM Class I and II areas.

Wildlife

1) Avoid conflicts between bighorn sheep and domestic sheep.

2) Address possible reintroductions into historic habitat, including forage competition

with livestock and other wildlife species and other possible conflicts.

3) Consider updating boundaries of important wildlife habitats including winter and summer ranges and key birthing areas.

4) Consider how to manage possible damage to elk habitat considering the ever-increasing numbers we are experiencing.

5) Beaver should be controlled since they do much harm to streams by cutting down trees.

6) Address important criteria for accomplishing predator control.

7) Keep livestock to a minimum on upland bird habitat during the nesting period.

8) Maintain and enhance bat habitat to ensure bats as a natural alternative method for controlling rangeland insect pests.

9) Western juniper management objectives should consider the habitat needs of rare species such as the spotted bat and the Pacific Townsend's big-eared bat.

10) Protection of winter habitat for bighorn sheep and mule deer should be a priority.

11) Livestock management objectives should include the needs of sensitive native wildlife species.

12) Study the economic value of sustaining viable populations of native wildlife species.

13) Incorporate wildlife projects with projects for other resource activities.

14) Include management prescriptions for other sensitive species; such as ferruginous hawk, yellow-billed cuckoo, sage grouse, and pygmy rabbit.

Minerals

1) Keep the public land open to hobby collecting of mineral and lapidary materials.

2) Mineral entry and mining should be a major issue, particularly under Alternative A.

3) Identify suitable locations for the development of mineral material sites.

4) Consider the impacts of mining on vegetation, water quality and quantity, and recreation values.

5) Mining should be allowed when possible.

6) Limit energy and mineral development in native ranges.

Fisheries

1) Consult with the U.S. Fish and Wildlife Service (USFWS) on proposed actions that affect Lahontan cutthroat trout.

2) Consider the reintroduction of anadromous fish in streams which formerly provided

habitat.

3) Manage streams in a way that will provide for anadromous fish.

Lands

1) Land exchanges should be considered in order to bring critical natural and cultural resources into public ownership; outright purchase of private property should be considered if necessary for the continued preservation of historic sites such as Five Bar, 45 Ranch, and Coyote Hole.

2) Closely evaluate land exchanged out of Federal ownership for cultural, archaeological, and plant resources.

3) Streamline the land exchange process.

4) Identify areas for retention and disposal of public land by a variety of methods.

5) Target State land in the Upper Owyhee area for acquisition by the Federal government.

6) Isolated parcels of public land should be sold to adjacent landowners to improve management; sales, land exchanges, or trades of isolated parcels should be a number one priority.

7) Easements across private land should be restricted to access for fighting fire unless there is a maintained county road.

8) Keep public land in Federal ownership; the BLM does a fine job of maintaining our public land.

9) R.S. 2477 assertions are absurd and should not be recognized nor entertained.

10) Building of new roads should be discouraged and roads not absolutely needed should be restored to natural conditions.

11) Widen the road on curves in the Rooster Comb area and install guard rails. The road is currently unsafe.

12) Consider criteria for handling agricultural trespass situations.

13) Identify areas potentially suitable for landfill.

Vegetation

1) Noxious weed control on Federal land should be an issue.

2) Need more vigorous weed control to stop the invasion of Scotch thistle, leafy spurge, and yellow starthistle, especially in WSA's.

3) Roads and trails should be monitored regularly to locate movement of exotic weeds and employ aggressive suppression with integrated pest management techniques.

4) Must consider how grazing, mining, logging, and recreation effect soil and vegetation and infiltration (ground water).

5) Areas with erodible soils, sensitive plants, unique plant communities, and high

archaeological values should be protected from wide spread or massive surface-disturbing activities and from recreational developments or staging areas.

6) Promote management activities that consider long-term preservation of Oregon's native vegetation.

7) Return BLM land to a series of naturally and fully functioning ecosystems.

8) Use only locally collected native seeds when restoring vegetation; cease to plant monocultures of nonnative species like crested wheatgrass to accommodate cattle grazing.

9) Vegetation management for this plan must reflect current direction that supports a wide variety of traditional consumptive and nonconsumptive uses, with emphasis on maintaining and enhancing timber production to support the local manufacturing base and forage production which supports local agricultural and recreational industries.

10) Surveys should be completed to locate plants that Native Americans used; restoration of impacted cultural plant communities should be a part of the plan.

11) Establish control sites where monitoring data can be collected to measure whether or not management objectives are being met.

12) Consider the potential of ecosystems to produce vegetation and establish baseline productions as well as determining current production.

13) Consider prehistory condition of plant communities as a basis for recovery.

14) Vegetation is actually improving; present management is working and should continue.

15) Convert nonnative seedings back to native vegetation communities.

Fire

1) Strongly urge planning for the reintroduction of fire to restore native plant communities; restoration of functioning native ecosystems should be the driving force in management decisions, not commodity concerns such as grazing.

2) Need to develop a long-term plan including the number of acres to be burned each year in order to keep ahead of increase in trees invading grasslands.

3) Plans for the reintroduction of fire should include a let burn policy.

4) Grazing should be used as a productive tool in fire management to remove fuels in certain areas.

5) Use fire to control western juniper invasions.

6) Recent scientific studies indicate modified fire suppression would be appropriate in natural plant communities where potential for cheatgrass infestation (and expansion of other exotic species or noxious weeds) is minimal.

7) Fire management should consider sensitive plant and animal species.

8) The highest priority for reintroducing fire should be to stabilize and restore soils, especially on uplands, to protect and restore native plant species, and improve water quality and water yield.

9) Livestock permittees should have a voice in the decision to let a naturally caused fire burn because of the effect on their ability to graze an area.

10) Address smoke management and the affect of smoke on local county communities—from both natural and prescribed fires.

11) Suppress all fires in southeastern Oregon. Do not conduct prescribed burns.

Special Status Plants

1) Inventories should be completed to locate special status species habitat.

2) Include species identified by ONHP as "sensitive in Oregon," and all other plants at risk.

3) Sites containing rare plants should be excluded from grazing.

4) Known special status species habitats should be monitored on a regular basis and any necessary alterations made to management practices in order to protect the plants.

5) Special status plants should be reintroduced into former habitat when they have been extirpated. *Stephanomeria malheurensis* and plants endemic to Leslie Gulch deserve special attention.

Other Comments

1) Anything similar to Alternative 2 of the "South Steens Allotment Management Plan and Environmental Assessment"?

2) Make use of volunteers; centralize your volunteer needs in one yearly publication to volunteers.

3) Minimize the paving of roads, keep areas as natural as possible.

4) Public awareness demands special emphasis be given three geographic areas within the SEORMP/EIS to restore degraded conditions: (a) Trout Creek Mountains, (b) Steens Mountain, and (c) Owyhee River.

5) BLM should not spend its scarce people and dollar resources on planning that benefits small, special interest groups who exploit and damage public property. Land use decisions should be favorable to healthy ecosystems including soil, water, and vegetation; important uses to preserve enjoyment of wildlife and scenery, camping, hiking.

6) Ensure compliance with the "Clean Water Act" (CWA) and Oregon environmental laws. Involve the Oregon Department of Environmental Quality (ODEQ) in development of management alternatives.

7) Consider the need for road and bridge improvements.

8) Coordinate any proposed road closures with the counties.

9) Propose actions which help protect cultural resources from grazing impacts; ensure compliance with the "National Historic Preservation Act."

10) Provide for an indepth economic analysis that compares the costs and benefits of capital improvements for grazing.

11) Enhance economic benefits by emphasizing grass production and good environmental practices in order to bolster the economies of local communities.

12) Develop a flexible management strategy to ensure prudent use of natural resources by competing demands on the ecosystem.

13) Human elements (needs) should be considered in the plan.

14) In the planning process, balance the needs of all resource and recreation users.

15) This plan should be coordinated with the Malheur County and Harney County land use plans.

16) Be sensitive to the potential conflicts between "commodity" uses and "natural values" when developing choices in the plan. Carefully consider such things as scientific knowledge which may help.

17) Will decisions be made on what most people want?

18) Work to get rural and urban people talking to each other and working together.

19) When information from the ICBEMP Final EIS is incorporated into the PSEORMP/FEIS make sure it is made compatible with local area needs and conditions.

20) The SEORMP/EIS should outline the monitoring plan in sufficient detail to describe all objectives and how to adequately communicate results to the public.

21) Will new data be collected for the SEORMP/EIS?

22) Develop a comprehensive transportation plan and road maintenance standards. For example, do not allow flat blading of roads with no provision for drainage.

23) Develop a management strategy for areas not designated wilderness by Congress.

Agencies and Groups That Sent Written Comments During Scoping

The agencies or groups that sent in written comments during the initial scoping process are listed below:

1) Range Ecology Group
2) Wildlife Management Institute
3) American Lands Access Association
4) Oregon Division of State Lands
5) Minerals Exploration Coalition
6) U.S. Fish and Wildlife Service
7) Native Plant Society of Oregon
8) U.S. Department of Transportation - Federal Highway Administration
9) Oregon Department of Environmental Quality
10) National Park Service
11) Oregon Natural Resources Council
12) Oregon Trout
13) Oregon Parks and Recreation Department

14) Animal and Plant Health Inspection Service
15) Bureau of Reclamation
16) Idaho Watersheds Project
17) Oregon Department of Fish and Wildlife

Appendix B

Relationship of Alternatives to Goals of State Land Conservation and Development Commission, Wildlife, and Forestry

Table B-1.—*Relationship of alternatives to statewide Land Conservation and Development Commission goals*

Land Conservation and Development Commission (LCDC) Statewide Goal	Discussion
1) To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.	• BLM's land review and planning process provides for public review and input at various stages. Public input was specifically requested in developing the issues, planning criteria, and alternatives described in the Draft SEORMP/EIS. The public was kept informed of the progress of the plan through planning updates. Public input will continue to be utilized in the environmental analysis process and development of the final plan.
2) To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions	• The preferred alternative and other alternatives have been developed in accordance with the land use planning process authorized by the "Federal Land Policy and Management Act" (FLPMA) of 1976 which provides a policy framework for all decisions and actions.
3) To preserve and maintain agricultural land.	• The majority of public land in the planning area is not suitable for agriculture. Alternatives A, C, D, D2, Proposed RMP, and E provide the public an opportunity to acquire agricultural land through sale or exchange. Alternative B provides the public an opportunity to acquire agricultural land through exchange only. Sales and exchanges could lead to new owner requests for nonagricultural (nongrazing) use of land previously in public ownership. Since the new owner would be subject to the applicable county plan, ordinances and building permit requirements, it is assumed that the sale of public land and exchanges would not, in themselves, violate county plans.
4) Conserve forestland for forest uses.	• The planning area has some commercial forestland and western juniper woodlands. Alternative B provides for current management direction with minimal commercial or silvicultural practices. Commercial timber harvest would be reduced under Alternatives A and C. Commercial timber harvest would not occur under Alternatives D, D2, E, and Proposed RMP. The Proposed RMP provides for commercial harvest and other management techniques only to preserve forest health and old growth stands. All timber and woodlands would continue to be managed for forest values under all alternatives.
5) To conserve open space and protect natural and scenic resources.	• Natural and visual resources were considered in the development of the alternatives. Management actions under all alternatives would have some adverse impact on these resources. The greatest impacts would be under Alternatives A and B. The least impact to these resources would be under Alternatives C, D, D2, E, and Proposed RMP, with some areas enhanced compared to current conditions.

6) To maintain and improve the quality of the air, water, and land resources of the State.	• All alternatives would comply with Oregon visibility protection program. The BLM is responsible for the requirements of the CWA on public lands they administer, and is required to maintain water quality where it presently meets EPA-approved Oregon State Water Quality Standards and to improve water quality where it does not meet standards on public land. All alternatives would ensure that surface water and ground water influenced by BLM activities comply with or are making progress toward achieving State of Oregon water quality standards for beneficial uses as established per stream by the ODEQ.
7) To protect life and property from natural disasters and hazards.	• The screening criteria for the establishment of ACEC's specifically address the protection of life and property from natural hazards. The only natural hazard identified by the public or BLM staff was the potential of earthquakes, which is outside the scope of this plan.
8) To satisfy the recreational needs of the citizens of the State and visitors and, where appropriate, to provide for siting of necessary recreational facilities including destination resorts.	• The BLM actively coordinates its outdoor recreation and land use planning efforts with those of other agencies to establish integrated management objectives on a regional basis. Under all alternatives opportunities would be provided to meet recreation needs. The quantity and quality of recreational opportunities would be the greatest under Alternatives A, B, and C. The quality of dispersed recreation would be greatest under Alternatives D, D2, and E, with a balanced mix under the Proposed RMP alternative. Recreation emphasis would be placed on dispersed activities under Alternative E.
9) To diversify and improve the economy of the State.	• Alternatives A, B, and C, and Proposed RMP would induce economic stability or gains in the long term through livestock forage production and mineral exploration. This could result in a slightly improved local and State economy. Alternatives D, D2, and E would provide lesser benefits through reduced commodity activities, and additional development or protection of certain areas. Public land may be available for rural or urban development following a BLM land sale or exchange, if the action would be permitted under the local government comprehensive plan and ordinances.
10)	• Statewide planning goals 10, and 13-19 do not apply to the planning area.
11) To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.	• LCDC statewide planning goals are administered by the Oregon Department of Land Conservation and Development.
12) To provide and encourage a safe, convenient, and economic transportation system.	• The establishment of transportation and utility corridors within the planning area provides for this need consistent with other goals and resource values. The availability of BLM land is greatest for those potential uses in Alternatives A, B, C, and Proposed RMP and decreases through Alternatives D, D2, and E.

	Conservation and efficient use of energy sources are objectives in all BLM activities. Use of dead trees for firewood is encouraged, along with sale and harvest of minor woodlands products for posts, poles, firewood, etc. Development of geothermal resources is encouraged with moderate constraints in Alternative A, and slightly increasing constraints through Alternatives B, C, D, and D2. Alternative E closes all geothermal activity. Geothermal energy development would be consistent with applicable county plans and ordinances under all alternatives, except Alternatives D2 and E.
13-19)	Statewide planning goal does not apply to this planning area.

Table B-2.—*Consistency of alternatives with State of Oregon wildlife goals and basic objectives of the forestry program for Oregon*

State of Oregon Goal	Discussion
Wildlife Goal	
1) To maintain all species of wildlife at optimum levels and prevent the serious depletion of any indigenous species.	Alternative D and D2 would maintain species of wildlife at nearly optimum levels. All other alternatives provide for reasonable numbers of wildlife consistent with the principles of multiple use management. Alternative A presents the highest likelihood of a need for listing some nongame Special status species under the protection of the ESA.
2) To develop and manage the land and water of the State in a manner that will enhance the production and public enjoyment of wildlife.	All alternatives are consistent with this goal. Habitat improvement for upland, riparian, aquatic, and wetland habitats would be most pronounced in Alternatives C, Proposed RMP, D, and D2.
3) To regulate wildlife populations and the public enjoyment of wildlife in a manner that is compatible with primary uses of the land and water of the State and provides optimum public recreation benefits.	All alternatives are consistent with this goal. The opportunity for public enjoyment would be greatest under Alternatives A–D2.
4) To develop and maintain public access to the land and water of the State and the wildlife resources thereon.	All alternatives are consistent with this goal. Acquisition and maintenance of public access is a major management action in each alternative.
5) To permit an orderly and equitable utilization of available wildlife.	All alternatives are consistent with this goal.
Basic Forestry Objective	
1) To maintain the maximum commercial forestland base consistent with resource uses while assuring environmental quality.	Alternatives A, B, C, and Proposed RMP are consistent with this objective. Alternatives D and E would reduce the available commercial forest base acreage. Proposed RMP would permit commercial harvest only as a management tool for maintaining forest health.
2) To maintain or increase the allowable annual harvest level to its fullest potential to offset potential socioeconomic impacts.	Since timber harvest has been nonexistent in the recent past, no significant socioeconomic impacts are anticipated under any alternative.

3) To identify and implement the levels of intensive forest management required to achieve maximum growth and harvest.	Approved forest best management practices (BMP's) would be employed under all alternatives.
4) To maintain community stability by remaining flexible for increases in future harvest levels that would offset projected shortages.	The commercial forest base in the planning area is not expected to have a significant effect, either positive or negative, on the maintenance of community stability (based on the Oregon State Department of Forestry, "Forestry Program for Oregon," published in 1977 and updated in 1982).

Appendix C

Common and Scientific Names for Plants and Animals

Table C-1.—*Common and scientific names for plants and animals mentioned in this plan*

Common Name	Scientific Name
PLANT SPECIES	
Forbs	
Alvord milkvetch	*Astragalus alvordensis*
Arrowleaf balsamroot	*Balsamorhiza sagittata*
Barren Valley collomia	*Collomia renacta*
Biddle's lupine	*Lupinus biddlei*
Biennial stanleya	*Stanleya confertiflora*
Bigelow's four o'clock	*Mirabilis bigelovii* var. *retrorsa*
Biscuitroot	*Lomatium* spp.
Brandegee's onion	*Allium brandegei*
Broad-flowered chaenactis	*Chaenactis stevioides*
California chicory	*Rafinesquia californica*
Camas	*Camassia* spp.
Chambers twinpod	*Physaria chambersii*
Clasping pepperweed	*Lepidium perfoliatum*
Cooper's goldenflower	*Hymenoxys lemmonii*
Cronquist's stickseed	*Hackelia cronquistii*
Cusick's chaenactis	*Chaenactis cusickii*
Cusick's giant hyssop	*Agastache cusickii*
Davis' peppergrass	*Lepidium davisii*
Desert chaenactis	*Chaenactis xantiana*
Ertter's senecio	*Senecio ertterae*
Four-winged milkvetch	*Astragalus tetrapterus*
Golden buckwheat	*Eriogonum chrysops*
Goosefoot	*Chenopodium* spp.
Greeley's cymopterus	*Cymopterus acaulis* var. *greeleyorum*
Grimy ivesia	*Ivesia rhypara* var. *rhypara*
Hairy wild cabbage	*Caulanthus pilosus*
Hairy-foot plantain	*Plantago eriopoda*
Halogeton	*Halogeton glomeratus*
Hedgehog cactus	*Pediocactus simpsonii* var. *robustior*
Ibapah wavewing	*Cymopterus ibapensis*
Janish's penstemon	*Penstemon janishiae*
King's penstemon	*Penstemon kingii*
King's rattleweed	*Astragalus calycosus*
Kruckeberg's hollyfern	*Polystichum kruckebergii*
Largehead clover	*Trifolium macrocephalum*
Large-flowered chaenactis	*Chaenactis macrantha*
Lemmon's onion	*Allium lemmonii*
Low hawksweed	*Crepis modocensis* ssp. *modocensis*
Mackenzie's phacelia	*Phacelia lutea* var. *mackenzieorum*
Male fern	*Dryopteris filix-mas*
Malheur cryptantha	*Cryptantha propria*
Malheur stylocline	*Stylocline psilocarphoides*
Malheur Valley fiddleneck	*Amsinckia carinata*
Mulford's milkvetch	*Astragalus mulfordiae*
Naked-stemmed phacelia	*Phacelia gymnoclada*
Ochre-flowered buckwheat	*Eriogonum ochrocephalum* ssp. *calcareum*
Onion	*Allium* spp.
Owyhee clover	*Trifolium owyheense*
Owyhee milkvetch	*Astragalus atratus* var. *owyheensis*
Packard's mentzelia	*Mentzelia packardiae*
Packard's lomatium	*Lomatium packardiae*
Palmer's evening-primrose	*Camissonia palmeri*
Phlox	*Phlox* spp.
Playa buckwheat	*Eriogonum salicornioides*
Playa phacelia	*Phacelia inundata*
Prickly-poppy	*Argemone munita* ssp. *rotundata*
Punctate langloisa	*Langloisia setosissima* ssp. *punctata*
Raven's lomatium	*Lomatium ravenii*
Rose's lomatium	*Lomatium roseanum*
Rush skeletonweed	*Chondrilla juncea*
Salt heliotrope	*Heliotropium curassavicum*
Short-lobed penstemon	*Penstemon seorsus*
Siberian water-milfoil	*Myriophyllum sibiricum*
Sinister gilia	*Gilia sinistra* ssp. *sinistra*
Slender wild cabbage	*Caulanthus major* var. *nevadensis*
Smooth mentzelia	*Mentzelia mollis*
Smooth malacothrix	*Malacothrix glabrata*
Snake River cryptantha	*Cryptantha spiculifera*
Snake River goldenweed	*Pyrrocoma radiata*
Snake River milkvetch	*Astragalus purshii* var. *ophiogenes*

Spreading stickseed	*Hackelia patens* var. *patens*
Sterile milkvetch	*Astragalus sterilis*
Sweet-clover	*Melilotus* spp.
Texas bergia	*Bergia texana*
Three Forks stickseed	*Hackelia ophiobia*
Trout Creek milkvetch	*Astragalus salmonis*
Two-stemmed onion	*Allium bisceptrum*
Tumble mustard	*Sisymbrium altissimum*
Weak-stemmed milkvetch	*Astragalus solitarius*
White locoweed	*Oxytropis sericia* var. *sericea*
White-flowered penstemon	*Penstemon pratensis*
Yellow star thistle	*Centaurea solstitialis*

Grasses and grasslikes

Alkali bulrush	*Scirpus robustus*
Annual dropseed	*Muhlenbergia minutissima*
Baltic rush	*Juncus balticus*
Basin wildrye	*Leymus cinereus*
Bluebunch wheatgrass	*Pseudoroegneria spicata*
Bottlebrush squirreltail	*Elymus elymoides*
Cattail	*Typha spp.*
Cheatgrass	*Bromus tectorum*
Creeping wildrye	*Leymus triticoides*
Crested wheatgrass	*Agropyron cristatum*
Foxtail barley	*Hordeum jubatum*
Idaho fescue	*Festuca idahoensis*
Indian ricegrass	*Oryzopsis hymenoides*
Mountain brome	*Bromus carinatus*
Needlegrass	*Stipa* spp.
Needleandthread grass	*Stipa comata*
Nodding melic	*Melica stricta*
Pinegrass	*Calamagrostis rubescens*
Porcupine sedge	*Carex hystericina*
Prairie Junegrass	*Koeleria macrantha*
Rush	*Juncus* spp.
Saltgrass	*Distichlis spicata*
Sand dropseed	*Sporobolus cryptandrus*
Sandberg bluegrass	*Poa secunda*
Sixweeks fescue	*Vulpia octoflora*
Sedge	*Carex* spp.
Slender wheatgrass	*Elymus trachycaulus*
Smooth brome	*Bromus inermis*
Spikerush	*Eleocharis* spp.
Thurber's needlegrass	*Stipa thurberiana*
Torrey's rush	*Juncus torreyi*
Western wheatgrass	*Pascopyrum smithii*

Shrubs

Antelope bitterbrush	*Purshia tridentata*
Basin big sagebrush	*Artemisia tridentata* ssp. *tridentata*
Big sagebrush	*Artemisia tridentata*
Bitter cherry	*Prunus emarginata*
Black sagebrush	*Artemisia nova*
Bud sagebrush	*Artemesia spinescens*
Ceanothus	*Ceanothus* spp.
Common snowberry	*Symphoricarpos albus*
Fourwing saltbush	*Atriplex canescens*
Gray rabbitbrush	*Chrysothamnus nauseosus*
Greasewood	*Sarcobatus vermiculatus*
Green rabbitbrush	*Chrysothamnus viscidiflorus*
Horsebrush	*Tetradymia* spp.
Iodine bush	*Allenrolfea occidentalis*
Lewis' mockorange	*Philadelphus lewisii*
Long-flowered snowberry	*Symphoricarpos longiflorus*
Low sagebrush	*Artemisia arbuscula*
Mormon tea	*Ephedra viridis*
Mountain big sagebrush	*Artemisia tridentata* ssp. *vaseyana*
Mountain mahogany	*Cercocarpus ledifolius*
Mountain snowberry	*Symphoricarpos oreophilus*
Oregongrape	*Mahonia repens*
Owyhee sagebrush	*Artemisia papposa*
Pacific willow	*Salix lucida* ssp. *lasiandra*
Packard's artemisia	*Artemisia packardiae*
Peachleaf willow	*Salix amygdaloides*
Rabbitbrush	*Chrysothamnus* spp.
Redosier dogwood	*Cornus sericea*
Sandbar willow	*Salix exigua*
Saskatoon serviceberry	*Amelanchier alnifolia*
Scouler's willow	*Salix scouleriana*
Shadscale saltbush	*Atriplex confertifolia*
Silver sagebrush	*Artemisia cana*
Spiny hopsage	*Grayia spinosa*
Spiraea	*Spiraea* spp.
Squaw apple	*Peraphyllum ramosissimum*
Stiff sagebrush	*Artemisia rigida*
Threetip sagebrush	*Artemisia tripartita*
Western chokecherry	*Prunus virginiana*
Willow	*Salix* spp.
Winterfat	*Krascheninnikovia lanata*
Wood's rose	*Rosa woodsii*
Wyoming big sagebrush	*Artemisia tridentata* ssp. *wyomingensis*

Trees

Alder	*Alnus* spp.
Black cottonwood	*Populus balsamifera* ssp. *trichocarpa*
Douglas fir	*Pseudotsuga menziesii*
Engelmann spruce	*Picea engelmannii*
Grand fir	*Abies grandis*
Lodgepole pine	*Pinus contorta*
Mountain alder	*Alnus incana*
Narrowleaf cottonwood	*Populus angustifolia*
Ponderosa pine	*Pinus ponderosa*
Quaking aspen	*Populus tremuloides*

Western juniper	*Juniperus occidentalis*
Western larch	*Larix occidentalis*
White fir	*Abies concolor*

ANIMALS

Amphibians

Blotched tiger salamander	*Ambystoma tigrinum melanostictum*
Columbia spotted frog	*Rana luteiventris*
Northern leopard frog	*Rana pipiens*
Western toad	*Bufo boreas*

Birds

American avocet	*Recurvirostra americana*
American kestrel	*Falco sparverius*
American robin	*Turdus migratorius*
American white pelican	*Pelecanus erythrorhynchos*
Bank swallow	*Riparia riparia*
Barrow's goldeneye	*Bucephala islandica*
Black tern	*Chlidonias niger*
Black-backed woodpecker	*Picoides arcticus*
Black-throated sparrow	*Amphispiza bilineata*
Blue grouse	*Dendragapus obscurus*
Bobolink	*Dolichonyx oryzivorous*
Brewer's sparrow	*Spizella breweri*
Broad-tailed hummingbird	*Selasphorus platycercus*
Bufflehead	*Bucephala albeola*
Burrowing owl	*Athene cunicularia*
Canada goose	*Branta canadensis*
Chukar partridge	*Alectoris chukar*
Cinnamon teal	*Anas cyanoptera*
Cooper's hawk	*Accipiter cooperi*
Ferruginous hawk	*Buteo regalis*
Flammulated owl	*Otus flammeolus*
Franklin's gull	*Larus pipixcan*
Gadwall	*Anas streperus*
Golden eagle	*Aquila chrysaetos*
Grasshopper sparrow	*Ammodramus savannarum*
Gray flycatcher	*Empidonax wrightii*
Gray partridge	*Perdix perdix*
Great gray owl	*Strix nebulosa*
Greater sandhill crane	*Grus canadensis*
Least bittern	*Ixobrychus exilis*
Loggerhead shrike	*Lanius ludovicianus*
Long-eared owl	*Asio otus*
Mallard	*Anas platyrhynchos*
Mountain quail	*Oreortyx pictus*
Mourning dove	*Zenaida macroura*
Northern bald eagle	*Haliaeetus leucocephalus*
Northern flicker	*Colaptes auratus*
Northern goshawk	*Accipiter gentilis*
Northern harrier	*Circus cyaneus*
Northern pygmy owl	*Glaucidium gnoma*
Peregrine falcon	*Falco peregrinus anatum*
Pileated woodpecker	*Dryocopus pileatus*
Prairie falcon	*Falco mexicanus*
Pygmy nuthatch	*Sitta pygmaea*
Red-tailed hawk	*Buteo jamaicensis*
Ring-necked pheasant	*Phasianus colchicus*
Rough-legged hawk	*Buteo lagopus*
Ruby-crowned kinglet	*Regulus calendula*
Sage grouse	*Centrocercus urophasianus*
Sage sparrow	*Amphispiza belli*
Sage thrasher	*Oreoscoptes montanus*
Sharp-shinned hawk	*Accipiter striatus*
Snowy egret	*Egretta thula*
Spotted sandpiper	*Actitus macularia*
Swainson's hawk	*Buteo swainsoni*
Three-toed woodpecker	*Picoides tridactylus*
Tundra swan	*Cygnus columbianus*
Upland sandpiper	*Bartramia longicauda*
Valley quail	*Callipepla californica*
Western bluebird	*Sialia mexicana*
Western burrowing owl	*Athene cunicularia*
Western sage grouse	*Centrocercus urophasianus phaios*
Western snowy plover	*Charadrius alexandrinus*
White-faced ibis	*Plegadis chihi*
White-headed woodpecker	*Picoides albolarvatus*
Williamson's sapsucker	*Sphyrapicus thyroideus*
Wilson's phalarope	*Phalaropus tricolor*
Yellow-billed cuckoo	*Coccyzus americanus*

Fish

Black bullhead	*Ictalurus melas*
Black crappie	*Pomoxis nigromaculatus*
Brook trout	*Salvelinus fontinalis*
Brown trout	*Salmo trutta*
Bull trout	*Salvelinus confluentus*
Inland redband trout	*Oncorhynchus mykiss* ssp.
Lahontan cutthroat trout	*Oncorhynchus clarki henshawi*
Lahontan redside	*Richardsonius egregius*
Margined sculpin	*Cottus marginatus*
Rainbow trout	*Oncorhynchus mykiss*
Smallmouth bass	*Micropterus dolomieui*
Tahoe sucker	*Catostomus tahoensis*

Invertebrates

Hotspring physa	*Physella* sp.
Malheur cave amphipod	*Stygobromus hubbsi*
Malheur pseudoscorpion	*Apochthonius malheuri*
Planarian	*Kenkia rhynchida*
River mussel	*Margaritifera* sp.
Threeforks pyrg	*Pyrgulopsis* sp.

Mammals

Antelope ground squirrel	*Ammospermophilus leucurus*
Black bear	*Ursus americanus*
California bighorn sheep	*Ovis canadensis californiana*
California wolverine	*Gulo gulo luteus*
Cougar	*Felix concolor*
Fringed bat	*Myotis thysanodes*
Kit fox	*Vulpes macrotis velox*
Long-eared myotis	*Myotis evotis*
Long-legged myotis	*Myotis volans*
Mule deer	*Odocoileus hemionus*
Pacific Townsend's big-eared bat	*Plecotus townsendii corinorhynis*
Preble's shrew	*Sorex preblei*
Pronghorn antelope	*Antilocapra americana*
Pygmy rabbit	*Brachylagus idahoensis*
Rocky Mountain elk	*Cervus canadensis*
Sagebrush vole	*Lagurus curtatus*
Spotted bat	*Euderma maculatum*
White-tailed jackrabbit	*Lepus townsendi*
Yuma myotis	*Myotis yumanensis*

Reptiles

Desert horned lizard	*Phrynosoma platyrhinos*
Mojave black collared lizard	*Crotaphytus bicinctores*
Northern sagebrush lizard	*Sceloporus graciosus*
Painted turtle	*Chrysemys picta*
Western ground snake	*Sonora semiannulata*

Appendix D1

Riparian/Wetland Areas

BLM depicts natural riparian/wetland areas as resources whose capability and potential is defined by the interaction of three components: (1) vegetation, (2) landform/soils, and (3) hydrology; while the functioning condition of these natural riparian/wetland areas are characterized by the interaction of these elements.

One of the main goals of the BLM is to have riparian/wetland areas in proper functioning condition (PFC). An overall objective of this goal is to achieve an advanced ecological status, except where resource management objectives, including PFC, would require an earlier successional stage, thus providing the widest variety of vegetation and habitat diversity for wildlife, fish, and watershed protection.

In the past, considerable effort has been expended to inventory, classify, restore, enhance, and protect riparian/wetland areas, but the effort has lacked consistency. No single classification, survey, inventory, or rating methods or systems have previously been developed to satisfy the complex interactions of healthy riparian/wetland areas. These areas are in dynamic equilibrium with streamflow forces and channel aggradation/degradation processes producing change with vegetative, geomorphic, and structural resistance. Ecological status determination of riparian/wetland vegetation does not necessarily take into account or address needed information that would be contained within aquatic habitat and stream surveys that is pertinent to the functionality of the riparian/wetland area. This is important because riparian/wetland areas will attain PFC long before they achieve an advanced ecological status.

When evaluating riparian/wetland areas, ecological status should not be confused with PFC. Riparian/wetland areas must be viewed with the understanding that the riparian system is inherently dynamic and PFC can and will occur within any or all ecological stages. PFC should be evaluated in terms of, and relationships to, all physical and biological functions occurring within the entire watershed, including the uplands and tributary watershed systems.

To comprehend how riparian/wetland areas operate and how management practices are implemented to ensure that an area is functioning properly, the capability and potential of a riparian/wetland area must be understood. Assessment of existing riparian vegetation condition and stream channel functionality is based upon a given riparian/wetland area's capability and potential. Here, capability is the highest ecological status a riparian/wetland area can attain given political, social, or economical constraints, whereas potential is the highest ecological status a riparian/wetland area can attain given no political, social, or economical constraints, often referred to as the potential natural community (PNC). Some riparian/wetland areas may be prevented from achieving their potential because of limiting factors such as human activities that alter the area's capability.

Management of riparian/wetland areas would be implemented to attain PFC as a first step to move habitat conditions of entire watersheds and/or their components that are comprised of uplands, streams, riparian/wetland areas, and lakes and ponds toward achieving terrestrial and aquatic objectives for attainment of DRFC's. Management practices such as grazing, mining, recreation, forest harvesting, and other forms of vegetation management would be designed for healthy sustainable and functional rangeland ecosystems as described in the 1997 "Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (S&G's)."

The next step in the attainment of DRFC's would be to evaluate RMO's (Appendix D3) within riparian/wetland areas RCA's. RCA's occupy that portion of watersheds where aquatic and riparian dependent resources receive primary emphasis for the maintenance, protection, and restoration of ecosystem processes and functions. RMO's are generally instream and riparian characteristics expressed as values for stream channel conditions and provide criteria to help assess aquatic, water quality, and riparian/wetland goals and objective attainment of desired future conditions. The DRFC's of riparian/wetland areas usually fall between PFC and the biological potential of RCA's supported by RMO's. Although attainment of PFC essentially assures that stream and riparian/wetland areas function and are on an improving trend, PFC may not be the final endpoint to reaching desired conditions. Management priorities in upland watershed areas and RCA's would focus prescriptions for the attainment of these desired conditions.

To summarize, PFC and ecological site status are two different characteristics of riparian/wetland systems. A site in any ecological status may be in functioning condition. Riparian/wetland areas should be judged on the functions that it provides compared to functions that should be present in relation to entire watersheds. All riparian/wetland systems should not be expected to have identical physical and biological functions. Riparian/wetland health (functioning condition), an important component of watershed condition, refers to the ecological status of vegetation, the geomorphic and hydrologic development, and the degree of structural integrity exhibited by the riparian/wetland area.

Appendix D2

Riparian Conservation Areas

Introduction

Riparian systems are water-influenced areas that include streams and other aquatic ecosystems. Riparian conservation areas (RCA's) are portions of watersheds where aquatic and riparian-dependent resources receive primary emphasis and where management activities are subject to specific standards and guidelines. RCA's include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems by: (1) influencing the delivery of coarse sediment, organic matter, and woody debris to streams; (2) providing root strength for channel stability; (3) shading the stream; and (4) protecting water quality.

In RCA's, maintenance, protection, and restoration of aquatic processes and functions are emphasized and goals and objectives for aquatic and riparian habitats are met. Conservation needs for aquatic and riparian systems can be summarized by the following four principles:

1) A stream requires nutrient inputs and energy to sustain its biological functions;

2) Riparian-associated plants and animals rely on the vegetation adjacent to streams;

3) Small streams are more affected by hillslope processes than larger streams; and

4) The likelihood of disturbances resulting in instream effects increases as adjacent slopes become steeper.

Ecological function, processes, and disturbance mechanisms are guides for use and protection priories in riparian areas. Boundaries between riparian areas and upslopes may need adjustment to address each of the larger-scale disturbance effects that may negatively or positively affect unique habitats or sensitive species in riparian environments. The actual size of riparian areas depends on local characteristics that define them; the dimensions of entire riparian areas are not always proportional to the size of aquatic systems.

RCA's are delineated into zones or gradients of influence, with an inner zone (Zone 1) where many primary processes and functions occur and an outer zone (Zone 2) where processes and functions occur but at different, less important (secondary) levels to the stream channel. The outer riparian zone also functions as a transition and buffer between upslope uses and disturbances and the aquatic environment. Zoning delineates major influence areas, establishing a basis for different levels of disturbance and vegetation management in each zone. This scheme sets the foundation for cumulative effects determination that is spatially sensitive in considering watershed disturbance.

Although the concept of zones applies to forestland and rangeland environments, it is more difficult to apply in rangelands. For the purposes of this document, zones are delineated only in forested environments. In rangeland environments, floodprone width is used to delineate RCA's.

Forested Lands

Zone 1 is the inner riparian area; it is the primary riparian community and energy influence area, and is most important for protection and maintenance of instream conditions. It also serves to transition processes, functions, and disturbances from streams to floodplains and adjacent riparian areas. Zone 1 is the area most sensitive to land management activities.

Zone 2 is the outer riparian area; it supports additional riparian area processes and functions (for example, microclimate) and also is a buffer area capable of absorbing disturbances from the uplands. It is the interface and transition between the inner riparian area and the uplands. In steeper landscapes where soils are subject to surface erosion, this zone may need extension using the slope adjustment factor. This extended area is referred to as Zone 2b.

Areas with landscapes or that are unstable or landslide prone will also be included in the RCA.

RCA Delineation Process

RCA delineation is based on three indicators: (1) site potential tree heights, (2) extent of flood prone width; or (3) riparian vegetation width; whichever provide the greatest protection to aquatic and riparian resources.

Site potential tree height (SPTH)—The definition of "site potential tree" for purposes of defining widths is: "The average maximum height of the tallest dominant trees (200 years or older) for a given site class" (FEMAT 1993, p.V-34).

The following site potential tree height shall be used as a minimum height for the forested potential vegetation group (PVG) in the planning area. PVG = dry forest, minimum SPTH (feet) = 120.

Slope adjustment factor—Adjustment of stream RCA widths for slope uses a curve based on probable sediment travel distance from concentrated sources of erosion and sediment from roads (Ketcheson and Megahan 1996).

The process for delineation of forested riparian areas (perennial and intermittent streams) involves dividing RCA's into two zones:

A) Minimum Widths for Perennial Streams

Zone 1 equals one site potential tree height, or the extent of the flood prone area, or the extent of wet and moist riparian vegetation, whichever best maintains, protects, and restores the aquatic environment. **Zone 2** equals one site potential tree height or the extent of dry riparian vegetation (Zone a), plus any width added from slope adjustment curve (Zone b).

B) Minimum Widths for Intermittent Streams

Zone 1 equals one-half site potential tree height, or the extent of the flood prone area, or the extent of wet and moist riparian vegetation, whichever best maintains, protects, and restores the aquatic environment. **Zone 2** equals one-half site potential tree height, or the extent of dry riparian vegetation (Zone 2a), plus any width added from slope adjustment curve (Zone b).

C) Additional Requirements Applicable for All Streams

Additional special consideration is necessary where there are landslides and in landslide prone or unstable areas. Landslide prone determination shall be based on the procedure outlined in Tang and Montgomery (1995) or other comparable techniques.

D) Total RCA Width

Total RCA width is the sum of the widths determined from Steps A through C.

Rangeland Streams

The process of delineation for rangeland riparian RCA's (perennial or intermittent streams) relies on flood prone widths by stream type, or the extent of potential natural riparian vegetation, whichever provides the greater protection to aquatic and riparian resources. Riparian vegetation can be delineated by aerial photographs or field inspection. Floodplain area is essentially equivalent to floodprone width defined by Rosgen (1994).

The following steps can be used to determine the flood prone area. It is suggested that field units develop relationships between bankfull width and drainage area or use existing relationships for their area.

1) Determine bankfull width for the drainage area above the point on the stream.

2) Determine the stream type using Rosgen stream type (Rosgen 1994) from aerial photographs or existing classification data.

3) Select entrenchment ratio (ER), which is the average maximum, for the particular stream types from the following:

Stream type	*A*	*B*	*C*	*E*	*F*	*G*
Entrenchment ratio	*1.4*	*2.2*	*5.3*	*56.9*	*1.2*	*1.3*

Entrenchment: Vertical containment of stream and the degree to which it is incised in the valley floor.

Entrenchment ratio: Ratio of the width of the flood prone area to the bankfull surface width of the channel.

Because entrenchment ratio is not applicable in D streamtypes (braided systems), riparian width shall be determined on a case-by-case basis using site-specific or local information.

4) Calculate the floodprone area by multiplying the bankfull width and entrenchment ratio.

Floodprone area: Width measured at an elevation which is determined at twice the maximum bankfull depth of the stream.

Local drainage area and bankfull width relationships should be used in place of graphs. Likewise, if field verified entrenchment ratios are known, this data should also be used in place of the average maximums shown in step 3.

Forested Land and Rangeland Ponds, Lakes, Reservoirs, and Wetlands

RCA's for ponds, lakes, reservoirs, and wetlands greater than 1 acre are either:

- the body of water or wetland and the area to the outer edges of the riparian vegetation,
- the extent of the seasonally saturated soil,

- the extent of moderately and highly unstable areas,
- a distance equal to the height of one site potential tree, or
- 150 feet slope distance from the edge of the maximum pool elevation of constructed ponds and reservoirs or from the edge of the wetland, pond, or lake, whichever is greatest.

For ponds, lakes, reservoirs, and wetlands less than 1 acre, the above RCA delineation shall apply, except that the minimum slope distance shall be 100 feet.

Appendix D3

Riparian Management Objectives

Introduction

Riparian management objective (RMO) values for stream channel conditions, when used in combination with objectives for this plan, provide criteria to help assess attainment of aquatic and riparian goals as described in the Desired Range of Future Conditions, Chapter 3. These values ("Interim Bull Trout Habitat Conservation Strategy," 1996; formulated from PACFISH (Decision Notice/Decision Record for the Interim Strategies for Managing Anadromous Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California [1995]) strategy and may be further refined by the Interior Columbia Basin Ecosystem Management Project) provide a description and characterization of watershed, riparian, and stream channel processes and existing conditions that can be expected to be achieved over time.

As indicated below, some RMO's apply to forested ecosystems, some to rangeland ecosystems, and some to all ecosystems. Actions that reduce habitat quality are inconsistent with the purpose of this plan's direction. However, the intent of RMO's are not to establish a ceiling for what constitutes good habitat conditions.

The following statements provide the intent for the use of the RMO's and their purpose in a comprehensive program:

1) RMO's are criteria (quantitative and/or qualitative) to help evaluate progress towards attainment of watershed, aquatic, and riparian goals described within the DFRC.

2) Interim RMO's are not to be viewed as independent from other components of the aquatic conservation strategy; rather, they are part of an aquatic conservation program. RMOs are not always sensitive to immediate effects but rather exhibit response to cumulative effects and factors influencing channel history over time.

3) Interim RMO's do not replace state and Federal water quality standards promulgated under the CWA or state laws, but they should complement these standards in providing measurable habitat attributes.

Procedure for RMO Application

RMO's apply to all perennial streams and intermittent fish bearing streams during those times that the streams support aquatic life. Effects of land management activities on intermittent streams may influence the attainment of RMO's in perennial streams. All instream and riparian variables should be used, in combination, to provide a comprehensive synopsis of watershed, riparian, and aquatic conditions, since placing emphasis on interpretations of individual variables may lead to erroneous conclusions related to watershed, riparian, and aquatic conditions. RMO application or development can follow these steps:

1) The values apply where ecologically attainable. Locally developed RMO's (quantitatively and/or qualitatively derived) supported with information from ecosystem analysis is preferred because of the variable nature of streams within the project and planning areas. Stream conditions can vary from disturbances and channel evolution histories that influenced channel form and conditions. It is recommended that district(s) staff conduct their own

analysis due to the variable conditions in the planning area. Staff should consider using similar techniques described by Overton et al. (1995) to define appropriate RMO's. RMO's should be developed from evaluations of reference conditions in similar landforms, climate, stream type and valley bottom settings, and potential vegetation. In all cases, the rationale supporting these changes, and the effects of the changes shall be documented.

2) Use information from step 1 to develop management actions for conserving or restoring watershed, riparian, and channel processes.

3) Monitor implementation and effectiveness of management if they have the intended results. Provide feedback information for future management objectives, action, and evaluation of RMO's.

RMO Criteria

Instream habitat features

Pool Frequency (all systems):

Wetted width (feet)	10	20	25	50	75	100	125	150	200
Pools per mile	96	56	47	26	23	18	14	12	9

Temperature: No measurable increase in maximum water temperature (7 day moving average of daily maximum temperature measured as the average of the maximum daily temperature of the warmest consecutive 7-day period). Maximum water temperature will be below 59 °F within adult bull trout holding habitat and below 48 °F within bull trout spawning and rearing habitats.

Maximum water temperatures below 64 °F within anadromous fish migration and rearing habitats and below 60 °F within anadromous fish spawning habitats.

Large woody debris (forested systems): >20 pieces per mile; >12 inch diameter; >35 foot length.

Bank stability (rangeland systems): >80 percent stable in non-forested systems.

Lower bank angle: >75 percent of banks with <90 degree angle (such as undercut).

Width/depth ratio: <10, mean wetted width divided by mean depth.

Riparian Vegetation

Applies to all forest and range riparian areas: mature and old forest, and late ecological status rangeland riparian conditions adapted to fire regimes and other disturbances characteristic for the site. Riparian vegetation RMO's should be measured by the percent similarity of current riparian vegetation to the mature forest and late ecological status range riparian community/composition. The percent similarity shall be greater than 60 percent (USDA 1992). The stepwise procedure for determining similarity is outlined in the riparian vegetation RMO discussion.

Procedure for determining riparian vegetation RMO: Functionality of aquatic and riparian environments can be fully evaluated with the inclusion of riparian vegetation. Riparian vegetation is generally more sensitive to immediate effects from management activities. In some vegetation and valley bottom settings, riparian vegetation can be responsive to restoration in short timeframes. Most instream RMO's are dependent upon riparian vegetation condition; therefore, a riparian vegetation RMO was included.

The following steps summarize a five-step method "Riparian Plant Association Groups and Associated Valley Bottom Types of the Columbia River Basin" (Manning and Engelking 1995) that could be used to assess and determine similarity of current riparian vegetation to potential riparian vegetation.

1) Identify the potential vegetation group in which the riparian area occurs.
2) Identify potential vegetation type and valleybottom type.
3) Identify potential riparian vegetation.
4) Determine existing riparian vegetation group.
5) Compare potential riparian vegetation group to existing riparian vegetation group.

The existing riparian vegetation should be at least 60 percent similar to the potential vegetation to meet the RMO. If there is less than 60 percent similarity and it is not attributable to absence of the potential riparian vegetation group within the valley bottom setting, then management actions that move riparian vegetation toward the potential should occur.

Appendix D4

Riparian Trend Analysis Worksheet

Table D4-1.—*Riparian trend analysis worksheet by category*

Usual study methods used to show trend	Downward indicators	Indicators of no change	Upward indicators
Woody riparian •Aerial imagery •Photo point studies •Key plant utilization studies	(A) Studies indicate a decline in the overall number of key woody plants (B) Studies indicate a decline in the overall canopy volume (height and width) of key woody plants (C) Studies indicate that vegetation removal is preventing the establishment of uneven-aged classes of key woody plants	(A) Studies indicate no change in the overall number of key woody plants (B) Studies indicate no change in the overall canopy volume (height and width) of key woody species (C) Studies indicate no change in the age class structure of key woody plants	(A) Studies indicate an increase in the overall number of key woody plants (B) Studies indicate an increasein the overall canopy volume (height and width) of key woody plants (C) Studies show that healthy uneven-aged stands of key woody plants are present
Herbaceous cover •Aerial imagery •Line intercept transects	(D) Studies indicate a decline in the overall amount of herbaceous ground cover (E) Studies indicate that herbaceous species composition has shifted toward more early succession species	(D) Studies indicate no change in the overall amount of herbaceous ground cover (E) Studies indicate no change in the herbaceous species composition	(D) Studies indicate an increase in the overall amount of herbaceous ground cover (E) Studies indicate that herbaceous species composition has shifted toward more late-succession species
Stream banks and channel •Stream channel form measurements •Aerial imagery •Photo point studies	(F) Studies indicate an increase in the amount of streambank erosion attributable to trampling damage (G) Studies show that water depth is decreasing (H) Studies show that stream channel is widening (I) Studies show incised channels are widening (J) Studies show that stream meanders are decreasing and channel is straightening	(F) Studies indicate no change in the amount of streambank erosion attributable to trampling damage (G) No changes in depth measurements (H) No change in stream channel (I) No change in channel depth (J) No change in number and type of stream meanders	(F) Studies indicate a decrease in the amount of streambank erosion attributable to trampling damage G) Studies show that water depth is increasing (H) Studies show that stream channel width is narrowing (I) Studies show that incised channels are healing with vegetation cover (J) Studies show that stream meanders are increasing
Water quality •Water turbidity samples •Fish and aquatic insect samples	(K) Increase in populations of fish and aquatic insects tolerant of high turbidity, low oxygen levels, high temperatures, or presence of contaminants contaminants (L) Sediment transport is increasing relative to baseline data	K) Sampling indicates no (change in the composition of aquatic insects and fish (L) Studies show no change in the amount of sedimentation	(K) Increase in populations of fish and aquatic insects intolerant of high turbidity, low oxygen levels, high temperatures, or presence of (L) Sediment transport is decreasing relative to baseline data

Appendix D5

Riparian Trends for Stream Segments

Table DS-1.—*Riparian trends for stream segments on public land in the Malheur and Jordan Resource Areas*

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Upper Quinn Drainage (Hydrologic unit 16040201)					
McDermitt Creek	13.8	Up	Yes	Yes	LSTS, NATV, COLD, HATV
	0.1	Unknown	Yes	Yes	COLD
Dry Creek	3.3	Unknown			
Hot Creek	0.3	Up			
Cowboy Creek	4.6	Up			
Lasa Creek	2.1	Unknown			
Lasa Creek TR	3.3	0.3	Unknown		
Mine Creek	2.1	Up			
Mine Creek East Fork	2.5	Static			
Mine Creek East Fork TR	2.5	0.4	Static		
Mine Creek West Fork	3.7	Up			
Indian Creek	8.2	Unknown	Yes	Yes	LCTR
	0.2	Up			
Indian Creek TR	5.5	0.9	Unknown		
Indian Creek TR	8.0	1.3	Unknown		
Cottonwood Creek	3.8	Up	Yes		
	4.0	Unknown			
Spring Creek	1.7	Up			
Spring Creek TR 1.7	1.0	Up			
McDermitt Creek North Fork	4.5	Up			
McDermitt Creek North Fork TR 2.3	2.1	Up			
McDermitt Creek North Fork TR 2.9	0.5	Up			
McDermitt Creek TR 5.5	1.3	Unknown			LSTS, NATV, COLD
McDermitt Creek TR 8.6	0.8	Unknown			LSTS, NATV, COLD
McDermitt Creek TR 27.8	1.3	Unknown			LSTS, NATV, COLD
McDermitt Creek TR32.2	0.9	Up			
	0.1	Unknown			
Payne Creek	4.0	Up			
Sage Creek	4.2	Up	Yes	Yes	LCTR
Sage Creek TR 5.8	1.2	Up			
Sage Creek TR 8.1	1.6	Up			
Sage Creek TR 8.1 TR 0.9	0.7	Up			
Sage Creek TR 8.8	0.5	Up			LCTR
Sage Creek TR 9.0	0.7	Up			
Line Canyon	1.4	Up			
Line Canyon TR 2.1	1.2	Up			
Turner Creek	3.6	Up			
Oregon Canyon Creek	7.6	Unknown	Yes		HATC
Fish Creek	2.2	Unknown			COLD
Jaca Creek	2.0	Unknown			
Jaca Creek TR 6.7	0.4	Unknown			
Jaca Creek TR 7.2	0.2	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Jaca Creek TR 7.5	0.5	Unknown			
Jackson Creek	2.1	Unknown			
Jackson Creek Middle Fork	0.6	Unknown			
Jackson Creek TR 5.3	1.9	Unknown			
Jackson Creek TR 8.9	0.5	Unknown			
Moonshine Canyon	1.0	Unknown			
Oregon Canyon Creek East Fork	4.9	Unknown			
Oregon Canyon Creek South Fork	1.8	Unknown			
Oregon Canyon CR S Fork TR 0.5	1.2	Unknown			
Oregon CN CR S F TR 0.5 TR 0.7	0.8	Unknown			
Oregon Canyon Creek TR 8.3	0.4	Unknown			
Oregon Canyon Creek TR 10.3	0.6	Unknown			
Oregon Canyon Creek TR 17.1	3.9	Unknown			
Oregon Canyon Ck TR 17.1 TR 10.3	3.3	Unknown			
Oregon Canyon Creek TR 27.8	1.3	Unknown			
Oregon Canyon Creek TR 27.9	0.3	Unknown			
Oregon Canyon Creek TR 28.3	1.2	Unknown			
Oregon Canyon Creek TR 29.7	0.5	Unknown			
Oregon Canyon Creek TR 29.8	0.4	Unknown			
Oregon Canyon Creek TR 30.6	0.7	Unknown			
Oregon Canyon Creek West Fork	1.7	Unknown			
Rock Creek	1.0	Unknown			
Rock Canyon	0.5	Unknown			
School House Creek	0.6	Unknown			
Shearing Corral Creek	2.4	Unknown			
Simpson Creek	1.0	Unknown			
St. Martin Creek	0.4	Unknown			
Tenmile Creek	7.0	Unknown			HATC
Cottonwood Creek	3.2	Unknown			
Tenmile Creek TR 8.3	1.3	Unknown			
Tenmile Creek TR 9.5	2.2	Unknown			
Tenmile Creek TR 11.6	2.4	Unknown			
Tenmile Creek TR 16.2	1.3	Unknown			
Trail Canyon	1.0	Unknown			
Trail Canyon TR 1.9	0.9	Unknown			
Middle Snake–Succor Drainage (17050103)					
Succor Creek	5.3	Up	Yes		NATV
	1.5	Unknown			
Antelope Creek	2.7	Unknown			
Carter Creek	0.6	Unknown	Yes		
Carter Creek South Fork	1.7	Up			REDB
Carter Creek South Fork TR 3.8	0.6	Up			
Dog Creek	3.4	Unknown			
Dog Creek TR 2.9	0.6	Unknown			
Hog Creek	1.3	Unknown			
McBride Creek	0.7	Unknown			
Pole Creek	1.7	Unknown			
Spring Creek	5.4	Unknown			
Spring Creek TR 5.1	0.8	Unknown			
Spring Creek TR 6.3	2.3	Unknown			
Whiskey Creek	0.1	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assesment	1998 303(d) water quality limited	Fish species in stream[1]
Whiskey Creek TR 0.5	2.6	Unknown			
Wilson Creek	2.7	Unknown			
Wilson Creek TR 1.5	1.2	Unknown			
Middle Owyhee Drainage (17050107)					
Owyhee River	53.2	Unknown	Yes	Yes	REDB, NATV, WARM, HATC
Antelope Creek	42.0	Unknown	Yes		NATV
Antelope Creek TR 6.5	0.8	Unknown			
Antelope Creek TR 17.0	0.8	Unknown			
Antelope Creek TR 21.5	3.3	Unknown			
Antelope Creek TR 41.6	0.7	Unknown			
Antelope Creek TR 41.9	1.0	Unknown			
Antelope Creek TR 42.4	1.6	Unknown			
Field Creek	16.0	Unknown			NATV
Pole Creek	11.9	Unknown			
Cavieta Creek	2.1	Unknown			
Pole Creek TR 2.4	0.5	Unknown			
Pole Creek TR 8.7	1.0	Unknown			
Pole Canyon TR 22.5 TR 3.0	0.3	Unknown			
Steer Canyon	2.5	Unknown			
Steer Canyon TR 7.6	1.6	Unknown			
Steer Canyon TR 7.6 TR 0.2	1.9	Unknown			
Hansen Flat Creek	0.7	Unknown			
Hansen Flat Creek TR 4.7	0.2	Unknown			
Hansen Flat Creek TR 4.9	0.2	Unknown			
Hansen Flat Creek TR 5.7	0.4	Unknown			
Trail Creek	7.0	Unknown			
Trail Creek TR 3.0	1.5	Unknown			
Trail CR TR3.0 TR0.6 TR1.8	0.2	Unknown			
Trail Creek TR 5.3	1.7	Unknown			
Trail Creek TR 5.7	1.7	Unknown			
Owyhee River North Fork	2.7	Unknown			REDB, NATV, WARM
Cherry Creek	0.5	Unknown			NATV
Owyhee River Middle Fork	0.5	Unknown			
Owyhee River West Little	7.3	Static		Yes	REDB, NATV
	49.1	Unknown			
Dry Canyon TR 2.8	0.3	Unknown			
Dry Canyon TR 5.0	0.2	Unknown			
Dry Canyon TR 5.4	0.4	Unknown			
Jack Creek	7.3	Unknown			
Deep Creek	2.5	Unknown			
Lake Fork	1.6	Unknown			
Massey Canyon	3.0	Unknown			
Massey Canyon TR 0.1	0.9	Unknown			
Massey Canyon TR 1.0	1.2	Unknown			
Owyhee River West Little TR 36.8	0.8	Unknown			
Owyhee River W L TR36.8 TR0.6	0.5	Unknown			
Owyhee River W L TR36.8 TR0.9	0.4	Unknown			
Owyhee River West Little TR 52.2	0.8	Unknown			
Toppin Creek	5.2	Unknown			
Soldier Creek	0.4	Unknown			
Coburn Creek	0.6	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Toppin Creek	1.6	Unknown			
Spring Creek	0.7	Unknown			
Spring Branch Creek	2.1	Unknown			
Willow Creek	7.2	Unknown			
Jordan Drainage (17050108)					
Jordan Creek	3.0	Unknown	Yes		NATV, WARM
Chicken Creek	1.3	Unknown			
Chicken Creek TR 2.3	0.2	Unknown			
Chicken Creek TR 2.8	0.5	Unknown			
Cow Creek	2.6	Unknown			WARM
Mahogany Creek	0.7	Unknown	Yes		
Fish Creek	1.7	Unknown	Yes		HATC
Fish Creek TR 2.7	1.2	Unknown			
Fish Creek TR 2.8	1.0	Unknown			
Old Maids Creek	2.6	Unknown			
Old Maids Creek TR 4.6	1.0	Unknown			
Thomas Creek	1.4	Unknown			
Horse Creek	0.4	Unknown			
Sheep Spring Creek TR 7.7	1.2	Unknown			
Trib No. 1 to Antelope Res	0.6	Unknown			
Trib No. 2 to Antelope Res	1.5	Unknown			
Trib No. 3 to Antelope Res	0.4	Unknown			
Crooked-Rattlesnake Drainage (17050109)					
Crooked Creek	4.8	Unknown	Yes		NATV
Bone Creek	0.4	Unknown			NATV
Dry Creek	11.7	Unknown			
	0.4	Down			
Rattlesnake Creek	24.0	Unknown	Yes		NATV, HATC
Battle Creek	4.4	Unknown			
Isaac Canyon	0.8	Unknown			
Battle Creek TR 0.8	0.5	Unknown			
Battle Creek TR 12.5	3.9	Unknown			
Deer Creek	2.5	Unknown			
Little Rattlesnake Creek	9.3	Unknown			
Rattlesnake Creek TR 27.6	1.7	Unknown			
Woolhawk Canyon	7.2	Unknown			
Lower Owyhee Drainage (17050110)					
Owyhee River	30.3	Up	Yes	Yes	REDB, NATV, WARM
	31.0	Unknown			
Birch Creek (Owyhee Reservoir)	3.4	Static			NATV
Birch Creek	2.4	Unknown			
Bogus Creek	3.4	Up			
	3.9	Unknown			
Dry Creek	13.5	Unknown	Yes		REDB, NATV, WARM
Butte Creek	2.1	Unknown			
Butte Creek TR 6.3	7.9	Unknown			
Wildcat Creek	3.6	Unknown			
Wildcat Creek TR 5.4	0.3	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream¹
Cold Spring Creek	6.2	Unknown			
Cold Spring Creek TR 0.3	4.1	Unknown			
Juniper Creek	3.2	Unknown			
Skull Creek	3.3	Unknown			
Indian Creek	4.5	Static			
Jackson Creek	5.1	Unknown			
Owyhee River TR 64.5	0.4	Unknown			
Owyhee River TR 65.1	1.1	Unknown			
Rock Spring Canyon	0.8	Static			
Spring Creek	2.4	Unknown			
(Twin Spr CR) Twin Springs CR TR 5.2	0.9	Unknown			
Willow Creek	6.2	Unknown			
Crowley Creek	2.5	Unknown			
Burnt Flat Creek	1.9	Unknown			
Lower Crowley Creek	2.3	Unknown			
L. Crowley Creek TR 2.0	2.1	Unknown			
Road Canyon	0.7	Down			
Upper Malheur Drainage (17050116)					
Malheur River	3.8	Up	Yes	Yes	NATV, HATC
Bull Canyon	6.2	Unknown			
Malheur River North Fork	1.1	Up	Yes	Yes	BUTR, REDB, NATV, HATC
	3.7	Static			
Little Malheur River	1.1	Static	Yes	Yes	REDB, NATV
Lost Creek	0.9	Unknown	Yes		
Warm Springs Creek	3.1	Static			
Bendire Creek	2.3	Up			
	6.3	Unknown			
Hunter Creek	1.7	Unknown			
Hunter Creek TR 4.4	0.8	Unknown			
Willow Basin Creek	3.7	Unknown			
Willow Basin Creek TR 2.5	0.6	Unknown			
Willow Basin Creek TR 2.7	0.6	Unknown			
Willow Basin Creek TR 2.9	0.9	Unknown			
Malheur River South Fork	0.3	Unknown	Yes	Yes	NATV, HATC
Granite Creek	2.3	Up	Yes		
	1.8	Unknown			
Lower Malheur Drainage (17050117)					
Malheur River	5.0	Up	Yes	Yes	REDB, NATV, HATC, WARM
	0.5	Unknown			
Black Canyon	0.9	Up			REDB
	1.1	Static			
Calf Creek	1.8	Up			REDB, NATV
	0.4	Static			
Cave Canyon	1.8	Unknown			
Cottonwood Creek	9.7	Up	Yes		REDB, NATV
	3.5	Static			
	1.6	Unknown			
Basin Creek	0.1	Up			
	3.6	Unknown			
Camp Creek	5.1	Unknown			REDB
Tims Creek	1.2	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Keeney Creek	11.0	Unknown			NATV
Long Creek	2.8	Unknown			
Wildcat Creek	1.7	Unknown			
Malheur River TR 41.9	0.3	Up			
	4.2	Unknown			
Gold Creek	5.4	Up	Yes		REDB
Henry Gulch	1.0	Up			
Hog Creek	1.7	Up	Yes		REDB
	2.4	Static			
	7.4	Unknown			
Hunter Creek	2.3	Up	Yes		
	3.2	Down			
Canyon Creek	0.7	Up			REDB
	0.9	Down			
	0.4	Unknown			
Chalk Canyon	3.4	Unknown			
Conroy Canyon	1.8	Unknown			
Dinner Creek	1.9	Unknown			
(Sand Hollow) Negro Rock Canyon	9.6	Unknown			
Pole Creek	2.0	Up	Yes		REDB, NATV
	0.2	Down			
Simmons Gulch	3.9	Up			
Spring Creek	2.1	Unknown			
Squaw Creek	11.3	Up			REDB, NATV
Squaw Creek South Fork	2.3	Static			
Willow Spring Creek	1.5	Unknown			
Bully Drainage (17050118)					
Bully Creek	3.8	Unknown	Yes	Yes	REDB, NATV
	3.8	Unknown			
Bully Creek North Fork	2.1	Up			
	0.8	Down			
	2.8	Unknown			
Bully Creek North Fork TR 5.4	1.7	Unknown			
Bully Creek TR 24.0	0.6	Unknown			
Clover Creek	2.7	Down	Yes		REDB, NATV
	1.5	Unknown			
Buckbrush Creek	1.6	Up			
	6.1	Static			
Buckbrush Creek TR 5.1	2.3	Unknown			
Clover Creek South	4.1	Unknown			
Clover Creek South TR 0.9	0.9	Unknown			
Clover Creek South TR 2.6	0.6	Unknown			
Clover Creek South TR 3.2	0.7	Unknown			
Clover Creek South TR 3.4	0.4	Unknown			
Clover Creek South TR 3.6	0.5	Unknown			
Clover Creek South TR 3.9	0.6	Unknown			
Clover Creek TR 13.3	0.6	Unknown			
Clover Creek TR 14.8	3.3	Unknown			
Clover Creek TR 26.7	0.2	Unknown			
Clover Creek TR 27.1	0.4	Unknown			
Clover Creek TR 27.3	0.3	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Clover CR TR 27.4 TR 0.7 TR 0.1	0.3	Unknown			
Clover Creek TR 27.41	1.8	Unknown			
Clover Creek TR 27.41TR 0.4	0.2	Unknown			
Clover Creek TR 27.41TR 0.7	0.9	Unknown			
Clover Creek TR 27.42	1.6	Unknown			
Deep Creek	0.7	Unknown			
Deep Creek TR 2.1	0.3	Unknown			
Hay Canyon	1.9	Unknown			
Log Canyon	4.3	Unknown			
Birch Creek	1.9	Unknown			
Birch Creek TR 1.2	0.9	Unknown			
Pancake Creek	2.5	Unknown			
Rail Canyon	3.2	Down			REDB, NATV
Rail Canyon TR 1.3	0.7	Unknown			
Rail Canyon TR 1.3 TR 0.2	0.3	Unknown			
Rail Canyon TR 2.3	0.3	Unknown			
Rail Canyon TR 2.4	0.2	Unknown			
Rail Canyon TR 2.5	0.3	Unknown			
Rail Canyon TR 3.1	0.1	Unknown			
Reds Creek	5.8	Up			NATV
	0.8	Static			
Brady Creek	1.2	Unknown			REDB
Brady Creek TR 0.3	1.2	Unknown			
Brian Creek	1.9	Static			
Cottonwood Creek at Reservoir	3.7	Up			NATV, HATC
	0.6	Down			
	4.3	Unknown			
NG Creek	1.7	Up	Yes		
	6.1	Down			
	3.2	Unknown			
Swede Flat Creek	0.8	Unknown			
Rock Cabin Creek	4.8	Down			
Rock Cabin Creek TR 1.9	3.2	Unknown			
Cottonwood Creek	0.7	Up	Yes		REDB, NATV, HATC
	8.5	Static			
Cottonwood Creek South Fork	0.3	Static			REDB, NATV
	6.0	Unknown			
Cottonwood CR South Fork TR 1.9	1.7	Unknown			
Cottonwood C SF TR 1.9 TR 0.8	0.7	Unknown			
Cottonwood CR South Fork TR 2.2	1.6	Unknown			
Cottonwood CR South Fork TR 3.0	1.3	Unknown			
Cottonwood CR South Fork TR 3.7	2.1	Unknown			
Cottonwood Creek TR 10.0	4.4	Unknown			
Cottonwood Creek TR 12.0	3.2	Unknown			
Cottonwood Creek West Fork	6.6	Static			REDB, NATV
Cottonwood CR West Fork TR 7.0	1.6	Unknown			
Dry Creek	7.6	Unknown			
Dry Creek East Prong	8.0	Down			
Dry Creek TR 3.3	6.9	Unknown			
Dry Creek TR 3.3 TR 3.9	0.8	Unknown			
Dry Creek TR 12.9	1.9	Unknown			
Godding Creek	3.3	Unknown			REDB, NATV

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Beaver Dam Creek	2.1	Unknown			
Indian Creek	2.0	Static			
	1.0	Down			
	0.4	Unknown			
Indian Creek North Fork	7.7	Unknown			
Indian Creek North Fork TR 8.5	2.0	Unknown			
Indian Creek South Fork	2.0	Up	Yes		REDB, NATV
	2.0	Unknown			
Gregory Creek	7.1	Unknown			
Gregory Creek TR 4.4	1.8	Unknown			
Gregory Creek TR 4.4 TR 1.8	0.6	Unknown			
Gregory Creek TR 6.4	1.1	Unknown			
Indian Creek South Fork TR 5.1	1.5	Unknown			
Indian Creek South Fork TR 7.2	2.0	Unknown			
Indian CR S Fork TR 7.2 TR 1.3	1.5	Unknown			
Indian CR S Fork TR 7.2 TR 2.3	1.2	Unknown			
Swamp Creek	4.7	Static			
North Bully Creek	2.6	Down			
McArthur Creek	2.8	Down			
McArthur Creek TR 1.9	0.8	Unknown			
Puckett Creek	1.7	Down			
Puckett Creek TR 1.0	0.7	Down			
South Bully Creek	4.6	Down			REDB, NATV
South Bully Creek TR 4.5	0.1	Down			
Whiskey Gulch	1.4	Unknown			
Steamboat Creek	3.6	Unknown			
Kitten Canyon	1.7	Unknown			
Steamboat Creek TR 2.3	1.4	Unknown			
Steamboat Creek TR 3.4	0.6	Unknown			
Steamboat Creek TR 3.7	0.6	Unknown			
Willow Drainage (17050119)					
Willow Creek	3.8	Up	Yes	Yes	
	0.7	Unknown			
Basin Creek	0.3	Up			
Black Creek	3.9	Static			
Dry Gulch	2.8	Unknown	Yes		
Dry Gulch TR 11.8	0.5	Up			
Dry Gulch TR 12.4	3.0	Unknown			
Dry Gulch TR 14.6	1.4	Static			
Kern Creek	4.4	Unknown			
Mill Boulder Creek	0.5	Unknown			
Milk Branch Boulder Creek	0.7	Unknown			
Mud Creek	2.6	Unknown			
Phipps Creek	2.0	Unknown			
Pole Creek	3.2	Down	Yes		
Shasta Gulch	1.8	Up			
	0.3	Static			
Sheep Corral Creek (Poison Creek)	2.0	Unknown			
Turner Creek	3.7	Down			
Willow Creek Middle Fork	0.5	Unknown			

Stream	Miles	Trend	1988 DEQ water quality assessment	1998 303(d) water quality limited	Fish species in stream[1]
Waterfall Creek	0.2	Unknown			
Willow Creek North Fork TR 2.1	3.3	Unknown			
Bridge Creek (Willow CR South Fork)	1.2	Unknown			
Brownlee Reservoir Drainage (17050201)					
Birch Creek	0.3	Unknown			
Alvord Lake Drainage (17120009)					
Antelope Creek	8.4	Unknown			LCTR
Antelope Creek TR 15.6	0.5	Unknown			
Antelope Creek TR 16.3	1.9	Unknown			
Little Antelope Creek	4.7	Unknown			
Fish Creek	6.5	Unknown			
Fish Creek South Fork	1.1	Unknown			
Twelvemile Creek	8.9	Unknown			
Twelvemile Creek TR 15.0	2.4	Unknown			
Dry Creek	8.1	Unknown			
Dry Creek TR 7.1	1.4	Unknown			
Whitehorse Creek	15.2	Up	Yes		LCTR
Cottonwood Creek	6.1	Up			LCTR
	0.7	Static			
Doolittle Creek	8.3	Up	Yes		LCTR
Doolittle Creek TR 0.5	0.8	Up			
Dry Creek	4.2	Up			
Fifteenmile Creek	10.9	Up	Yes		LCTR
Fifteenmile Creek TR 4.6	4.0	Up			
Fifteenmile Creek TR 9.4	0.8	Up			
Little Whitehorse Creek	14.0	Up	Yes	Yes	LCTR
Little Whitehorse Creek TR 10.6	0.2	Up			
Little Whitehorse Creek TR 10.9	3.6	Up			LCTR
Sheepline Canyon	3.5	Up			
Whitehorse Creek TR 19.2	0.9	Up			
Whitehorse Creek TR 24.3	1.7	Up			
Whitehorse Creek TR 24.3 TR 0.4	0.8	Up			
Whitehorse Creek TR 24.3 TR 1.2	0.5	Up			
Whitehorse Creek TR 27.2	1.2	Up			
Willow Creek	15.5	Up	Yes	Yes	LCTR
	2.8	Down			
Willow Creek TR 21.8	2.9	Up			
Willow Creek TR 26.6	1.9	Up			
Willow Creek TR 26.9 (Jaw Bone)	2.5	Up			LCTR
Willow Creek TR 26.9 TR 1.2	1.2	Up			
Willow Creek TR 26.9 TR 2.6	0.3	Up			
Willow Creek TR 26.9 TR 2.7	0.2	Up			
Willow Creek TR 29.4	1.7	Up			

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[1] If a fish species is noted as present, the species may not be in all stream reaches, and all stream reaches may not have fish. Definitions of species abbreviations are: BUTR = bull trout; COLD = nonnative coldwater species, such as brook trout; HATC = hatchery fish; LCTR = Lahontan cutthroat trout; LSTS = Lahontan redside and Tahoe sucker; NATV = native species; may include game and nongame fish; REDB = redband trout; TRHY = cutthroat/rainbow trout hybrid; WARM = nonnative warmwater species, such as smallmouth bass.

Appendix D6

Water Quality Restoration Plans

If site-specific GMA evaluations determine that BLM management actions are contributing to the reason for the 303(d) listing, the BLM will develop water quality restoration plans (WQRP's). These plans provide the specific actions that the BLM will implement to bring 303(d) listed waters into compliance with water quality standards within a reasonable timeframe.

In some instances, the BLM may evaluate GMA's and complete WQRP's before the State develops its TMDL's and WQMP's. When this occurs, the BLM will submit its WQRP's to the State so that the State may use the information to develop the TMDL's and WQMP's. To facilitate possible incorporation of the BLM's WQRP information and management actions into the State's WQMP's, the BLM will develop its WQRP's using the Oregon DEQ's guidance document for developing WQMP's. The WQRP's will, therefore, include or address the elements described below to the extent possible:

1) Condition assessment and problem description;

2) Goals and objectives;

3) Proposed management measures;

4) Timeline for implementation;

5) Identification of responsible participants;

6) Reasonable assurance of implementation;

7) Monitoring and evaluation;

8) Public involvement;

9) Maintenance of effort over time; and

10) Discussion of costs and funding.

WQRP's that are developed and incorporated into GMA's or other site-specific activity plans to address 303(d) listed streams may include components of existing plans or incorporate them by reference where they are consistent with the ten elements, in particular goals, objectives, reasonable assurance of implementation, and maintenance of effort over time. WQRP's will tier to or incorporate by reference the three resource management plans and approved records of decision, including the objectives, methodologies, criteria, best management practices (Appendix O), and livestock grazing practices and project development (Appendixes R and S) both for the uplands and riparian/wetland areas.

In some instances existing activity plans (agreements, permits, biological assessments and opinions, or other documents that stipulate management) that address 303(d) listed streams would require assessment of current management direction for concurrence with the ten elements. Plans that have not fully entertained all elements may need to be readdressed or supplemented to the extent possible with additional information for consistency. The augmented activity plans would then fulfillment WQRP requirements.

Element 1: Condition Assessment and Problem Description

The WQRP will identify the impaired water quality standards and beneficial uses as identified in Oregon Administrative Rules Chapter 340 of listed waterbodies and stream segments. The beneficial uses that are most impacted by nonpoint source pollutants on public land are salmonid fish spawning and salmonid fish rearing, although aesthetics, resident fish and aquatic life, and water contact recreation could also be affected.

Descriptions of subbasins, upland, riparian, and stream conditions in general are in Chapter 2, as are the human-caused activities that can affect water quality. Although human-caused point-source pollution occurs in the subbasins, most of the pollution related to BLM activities is nonpoint source. In general, the relationship between the upland and riparian conditions to water quality are identified in Table D6-1.

Water quality in the area also naturally varies greatly depending on topography, elevation, proximity to spring sources, climate, and other factors that are outside of human control.

Late summer stream flows are naturally affected by high elevations of the upper portions of watersheds, the depth of the snowpack, the timing and duration of the snowmelt, and the level of saturation or dryness of the landscape. Several water quality parameters, including water temperature, dissolved oxygen, and instream habitat availability, are consequently affected throughout entire stream systems depending upon location within the watershed.

The size of the watershed and amount of ground water recharge from springs or subsurface flow are also factors that influence the level of downstream erosive forces, which can affect the amount of sedimentation and quality of instream habitat. Water temperature can be affected by ambient air temperature and exposure to solar radiation, as affected by elevation, topography, aspect, annual temperature variation, and season, all of which are not under human control. Dependent upon soils, topography, climate, and elevation, different areas of the watersheds have different potential vegetative communities. These and natural disturbances, such as wildfire, can affect the soil surface protection and soil infiltration capability of the uplands and riparian areas. This, in turn, can affect the level of sedimentation and water volume in the streams.

Table D6-1.—*Watershed conditions and relationship to nonpoint source pollution*

Watershed condition	Description	NPS pollution: relation to watershed condition
I. Upland	A. Insufficient vegetative basal and canopy cover to protect surface soils	•Sedimentation: Soil surface erosion in uplands •Turbidity: Sedimentation from soil surface erosion in uplands •Habitat modification: Siltation of spawning gravels from sedimentation and reduction in primary productivity from turbidity
	B. Insufficient vegetation to allow soil infiltration	•Flow modification: Reduced water retention •High sedimentation: High peak runoff causing upland soil surface erosion and riparian bank erosion •High turbidity: Sedimentation from erosion in uplands and riparian area •Habitat modification: Siltation of spawning gravels from sedimentation and reduction in primary productivity from turbidity •High temperature: Low summer flow and reduced cool ground water inflow •Low dissolved oxygen: High temperature reduces oxygen solubility
II. Riparian area	A. Streambank shade insufficient to prevent excessive warming from direct solar radiation	•High temperature: Increased exposure, allowing solar heating •Low dissolved oxygen: High temperature reduces oxygen solubility •Algal growth: High temperature from solar heating •Turbidity: High algal growth
	B. Insufficient bank stability allowing excessive streambank erosion	•Sedimentation: Streambank erosion •Flow modification: Reduced floodplain development resulting in reduced water retention causing increased spring peak flows and decreased summer ground water inflow •High temperature: Streambank erosion resulting in widening of stream allowing increased solar heating; reduced shade from overhanging banks; low summer flows and reduced cool ground water inflow •Low dissolved oxygen: High temperature reduces oxygen solubility •Algal growth: High temperature from solar heating •Turbidity: High algal growth and sediments from bank erosion •Habitat modification: Reduced point bar formation for pool formation in outer meander curves; reduced cover from undercut banks; reduced cover due to shallower waters; reduced edgewaters and floodplains for refuge from high runoff velocities and for fry habitat; reduced spawning gravel availability due to sedimentation
	C. Vegetation sparse or not vigorous, causing reduced infiltration	•Flow modification: Reduced water retention •High temperature: Low summer flow and reduced cool ground water inflow •Sedimentation: Increased peak flow causing streambank erosion •Habitat modification: See above on bank stability
	D. Vegetation sparse, reducing filtering capability	•Sedimentation: Higher input of upslope sediments

Element 2: Goals and Objectives

The goal of the WQRP is to meet applicable Oregon water quality standards. This would occur through implementation of BMP's, implementation of rangeland standards and guidelines, and watershed restoration, as accomplished through the achievement of the desired range of future conditions (DRFC's), described in Chapter 1. The goals, objectives, and management directives in the PSEORMP/FEIS, described in Chapter 3, address DRFC and the expected result in improvement for water quality, riparian/wetland areas, vegetation in upland areas, habitat for special status species, and fisheries and aquatic habitat in general.

Watershed restoration is assumed to be defined by the potential of the area. For example, in areas where deep channel entrenchment has occurred such that the top of the bank is much greater than the bankfull stage, restoration is limited to the potential floodplain development within the incised channel and continued shifts in localized erosion and deposition if the channel is still moving toward equilibrium. Achievement of the water quality goal through watershed restoration would be by implementing the necessary management to meet the PSEORMP/FEIS objectives, BMP's (Appendix O), and the 1977 "Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington (S&G's)."

Grazing administration regulations for the BLM (43 Code of Federal Regulations Parts 4, 1780 and 4100) set forth the requirement to manage to ". . . promote healthy, sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to promote properly functioning conditions; . . . and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands." S&G's were developed pursuant to 43 Code of Federal Regulations, Subpart 4180 and approved August 12, 1997. Standard 4 directly states the water quality goal: "Surface water and ground water quality, influenced by agency actions, complies with State water quality standards." Standards 1 and 2 address the properly functioning condition of the watersheds. Standards 3 and 5 reflect the ecological processes in the watershed and habitat for native species. Watershed restoration and, therefore, water quality would be achieved through the attainment of Standards 1, 2, 3 and 5. The relationship of these standards to watershed conditions affecting water quality are identified in Table D6-2.

Table D6-2.—*Standards for Rangeland Health and relationship to watershed condition factors (Table D6-1) contributing to nonpoint source pollution*

Standard	Description	Relationship to watershed condition factor (Table D6-1) contributing to nonpoint source pollution
1	Upland soils exhibit infiltration and permeability rates, moisture storage and stability that are appropriate to soil, climate and landform.	•Protection of surface soils will increase because the improvement in species and structural diversity will result in increased vegetative basal and canopy cover to reduce erosive energy due to overland flow and precipitation. (IA) •Soil infiltration will increase because the improvement in species and structural diversity will result in increased vegetative basal and canopy cover to intercept overland flow and precipitation. (IB)
2	Riparian/wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.	•Streambank shade will be increased through improvement of shade-providing riparian woody species. (IIA) •Streambank stability will improve through improvement of herbaceous and woody species to provide root mass to provide a matrix for holding the soil particles Z together. (IIB) •Infiltration will be improved through increase in basal and canopy vegetative cover to intercept overland flow and precipitation. (IIC) •Filtering capability will be improved through increase in basal vegetative cover to intercept sediments from overland flow, including floodplain overflow. (IID)
3	Healthy, productive and diverse plant and animal populations and communitiesappropriate to soil, climateand landform are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.	•Protection of surface soils will increase because the improvement in species and structural diversity will result in increased vegetative basal and canopy cover to reduce erosive energy due to overland flow and precipitation. (IA) •Soil infiltration will increase because the improvement in species and structural diversity will result in increased vegetative basal and canopy cover to intercept overland flow and precipitation. (IB) •Streambank shade will be increased through improvement of shade-providing riparian woody species. (IIA) •Streambank stability will improve through improvement of herbaceous and woody species to provide root mass to provide a matrix for holding the soil particles together. (IIB) •Infiltration will be improved through increase in basal and canopy vegetative cover to intercept overland flow and precipitation. (IIC) •Filtering capability will be improved through increase in basal vegetative cover to intercept sediments from overland flow, including floodplain overflow. (IID)
5	Habitats support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and landform.	•Habitat modification that is adverse to the fish species will be reduced as habitat is restored to support viable populations. (IA-B, IIA-D, IIIA) •Temperature, sedimentation, algal growth, turbidity, summer flow, and dissolved oxygen should be at levels that support viable populations of the fish species. (IA-B, IIA-D, IIIA)

Element 3: Proposed Management Measures

The WQRP's will incorporate adaptive management strategies, as described in Chapter 1, to address and accomplish resource objectives on public lands for all permitted uses and activities. This adaptive strategy will evaluate permitted uses and activities, recommend and initiate adjustments as needed to meet the desired resource objectives, and monitor results for effectiveness. Effectiveness will be evaluated through implementation of monitoring plans associated with each WQRP.

The WQRP will address restoration or protection of the upland vegetation as well as the riparian/wetland areas for attainment and maintenance of water quality standards. Table D6-3 identifies the more pertinent management actions by alternative from Chapter 3 that will result in progress toward meeting the S&G's and watershed conditions that affect water quality. WQRP's will include site-specific management activities that are in compliance with the management actions identified in Table D6-3 and in the approved ROD's.

Table D6-3.—*SEORMP management actions (Chapter 3) that are directly related to or emphasize Standards for Rangeland Health (SRH, Table 2) and Watershed Conditions (Tables D6-1 and D6-2) that affect water quality*

SEORMP management objective and action number	Alternative								
	A	B	C	D	D2	E	PRMP	SRH	Watershed condition
Energy and Mineral Resources									
Objective 1 - Action 3	X		X	X	X	X	X	2	IIA, IIB, IIC, IID
Objective 2 - Action 1						X		2	IIA, IIB, IIC, IID
Objective 3 - Action 1	X		X	X	X	X	X	2	IIA, IIB, IIC, IID
Rangeland Vegetation									
Objective 1 - Action 2			X	X	X		X	1, 3	IA, IB, IIA, IIB, IIC, IID
Objective 1 - Action 3			X	X	X		X	1, 3	IA, IB, IIA, IIB, IIC, IID
Objective 1- Action 5			X	X	X		X	1, 3	IA, IB
Forest and Woodlands									
Objective 1 - Action 1	X		X	X	X	X	X	1, 3	IA, IB
Objective 1 - Action 2	X		X	X	X	X	X	1, 3, 5	IA, IB
Objective 2 - Action 1			X	X	X		X	1, 2, 3	IA, IB
Objective 2 - Action 2	X	X	X	X	X		X	1, 3	IA, IB
Objective 2 - Action 3	X	X	X	X	X	X	X	1, 2, 3	IA, IB, IIA, IIB, IIC, IID
Water Resources and Riparian/Wetland Areas									
Objective 1 - Action 1	X							2, 4	IIA, IIB, IIC, IID
		X	X	X	X	X	X	1, 2, 3, 4	IA, IB, IIA, IIB, IIC, IID
Objective 2 - Action 1	X	X						2,4	IIA, IIB, IIC, IID
			X	X	X	X	X	1, 2, 3, 4, 5	IA, IB, IIA, IIB, IIC, IID
Fish and Aquatic Habitat									
Objective 1 - Action 2	X							2,4,5	IIA, IIB, IIC, IID
			X	X	X	X	X	1, 2, 3, 4, 5	IA, IB, IIA, IIB, IIC, IID
Wild Horses									
Objective 1 - Action 2	X		X	X	X		X	1, 2, 3	IA, IB, IIA, IIB, IIC, IID
Rangeland/Grazing Use									
Objective 1 - Action 2			X	X	X	X	X	1, 2, 3	IA, IB, IIA, IIB, IIC, IID
Recreation									
Objective 1 - Action 2			X	X	X		X	1, 2, 3, 4, 5	IA, IB, IIA, IIB, IIC, IID

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[1] The listed management actions apply throughout the planning area and either specifically require special management to improve or protect riparian and upland watershed conditions or emphasize improving or protecting native vegetation and natural values.

Element 4: Timeline for Implementation

Implementation of WQRP's will begin with completion of appropriate NEPA analysis and decision. Most of the activities that affect riparian condition and water quality will be evaluated within the first 5 to 10 years of implementation. Implementation of management directives to meet plan objectives will occur initially within higher priorities areas based upon input from the public, and local, state, and federal agencies.

Specific timeframes for meeting standards will be dependent upon stream segment and landscape priorities. Any use or activities on public land that presently or in the future will not lead to the attainment of water quality standards, PFC, and RMO's in riparian/wetland areas (RCA's) will be adjusted to result in improvements in meeting plan objectives and the beneficial uses of each stream system.

Element 5: Identification of Responsible Participants

The State's WQMP's may address lands administered by the BLM, other state and federal agencies, and private landowners. The level to which various public and private participants enter into required roles, responsibilities, and commitments will be determined by land ownership and the position and pattern of property within the watershed or subbasins. The WQRP addresses the lands administered by the BLM.

Element 6: Reasonable Assurance of Implementation

WQRP's will be implemented because the BLM is required to comply with the CWA and meet Oregon standards for water quality. BLM conformance requirements with these standards for Public Lands, including the SEORMP planning area, are reiterated in the S&G's. In addition, CFR 4180.2.c states, "The authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards ... made effective under this section." The BLM and the ODEQ have also entered into a memorandum of agreement, April 1990, that provides a framework for the two agencies to "cooperate on projects of mutual concern to protect water quality statewide and to benefit the people of the State of Oregon."

In addition to the CWA, other numerous laws, regulations, policies, and Executive orders direct BLM to manage for water quality for the benefit of the nation and its economic, social, and recreational needs.

Water quality is not only important for beneficial human uses but also for proper ecosystem function. Management practices for grazing, mining, recreation, forest and woodland product harvest, and other forms of surface disturbing activities or vegetative management for restoring and maintaining water quality will be designed for healthy sustainable and functional rangeland ecosystems. Desired healthy and functional ecosystems requirements are described in the S&G's and in the standards for aquatic/riparian strategies in "An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins" (2000).

Element 7: Monitoring and Evaluation

The WQRP is an adaptive management strategy; therefore, if monitoring indicates that progress is not occurring, evaluations will be conducted on existing situation and any required adjustments will be implemented to meet the objectives. A monitoring plan will be developed and incorporated into the WQRP to address the specific objectives, management directives, and methodologies.

Monitoring for WQRP's for each stream, watershed or subbasin will be dependent upon the issues and problems identified for that particular geographic area. Potential monitoring parameters may be those that are identified as "potential indicators" in the S&G's. The approach to monitoring will be to monitor to the intensity and frequency needed to address each listed segment on a case-by-case basis.

Element 8: Public Involvement

The WQRP's will be developed with cooperation from the public at scheduled public scoping meetings and public review. This required public scoping will occur during the development of the WQRP and provide the public a platform to input their concerns and comments on resource issues and management objectives.

It is the BLM's intent that public comments on the listed 303(d) streams, the parameters of their listing, and any management measures which address them will serve as partial fulfillment of the public comment requirement for a WQRP. In addition to the information given in this SEORMP, WQRP's may incorporate other site-specific or geographic area NEPA documents, such as an environmental assessments, on which public comment has been or will have been solicited.

Element 9: Maintenance of Effort Over Time

Implementation of the WQRP's directives will continue on all streams until the water quality standard is met. Whenever possible and practical, WQRP's will be developed that address several streams at a time and include streams that are not on the 303(d) list at the time of plan development. Also, WQRP planning efforts may be combined with other water quality planning efforts to avoid duplication of effort and provide the most effective means of addressing water quality issues at the watershed scale.

Element 10: Discussion of Costs and Funding

Guarantee of commitment to outyear budgets is not possible for the BLM because appropriations and priorities are subject to annual Congressional action. The BLM will make every attempt to secure funding for implementation of approved WQRP's, including monitoring and required projects. Depending upon the responsible participants, BLM will attempt to develop alternatives to secure needed funding, including matching-funds and cost-sharing.

Appendix E

Allotment Summaries

Malheur Resource Area of Vale District administers livestock grazing within 123 allotments, and Jordan Resource Area administers livestock grazing within 45 allotments. Following is a summary of the current management for each allotment, including authorized livestock grazing levels and management objectives specific to individual pastures. "Additional Management Considerations with Implementation of the Proposed RMP Alternatives" identifies known concerns within each allotment which would be addressed during the next scheduled evaluation/analysis of implementation of existing activity plans, or the development of new activity plans. The listing of resource concerns in each allotment may not be all inclusive, as other issues within a given allotment may be identified as information becomes available. Implementation of appropriate management actions to implement decisions of the RMP and regional Standards and Guidelines for Rangeland Health at the allotment scale would follow evaluation/analysis as summarized in the adaptive management process.

Allotment summaries would be updated during the allotment evaluation/geographic analysis process. The public would be informed of activity plan changes through planning updates following coordination with interested publics.

Allotments summaries are ordered by allotment number. Following is an alphabetical listing of allotments in MRA and JRA to assist the reader in finding allotments of interest.

Malheur Resource Area

Agency Mountain (00161)
Alder Creek (00143)
Alkali Spring (20101)
Allotment #2 (10201)
Allotment #3 (10202)
Allotment #4 (10203)
Allotment #6 (10204)
Amelia Butte (10155)
Baldy Mountain (00131)
Becker Creek (10117)
Beulah Reservoir (10217)
Birch Creek (10506)
Black Butte (00304)
Blackjack (10501)
Board Corrals (10507)
Boney Basin (00307)
Boston Horse Camp (00113)
Boswell Spring (00120)
Boulder Creek (00138)
Brian Creek (10215)
Bridge Creek (00305)
Bridge Creek East (00145)
Bridge Creek West (00109)
Bridge Gulch (00124)
Brogan Canyon (00148)
Buckbrush (10218)
Bully Creek (00132)
Bully Reservoir (10224)
Butte (00308)
Butte Tree (10212)
Butterfield Spring (00150)
Calf Creek (00162)
Canal (00152)
Canyon Creek (00151)
Castle Rock (10211)
Chalk Butte (00128)
Chukar Park (00225)
Clover Creek Individual (10210)
Cottonwood Creek (00226)
Cottonwood Creek (10140)
Cottonwood Mountain (20102)
Cow Creek (00144)
Cow Valley (00115)
Dearmond-Murphy (10206)
Dry Creek Individual (00135)
Dry Gulch (00129)
East Moores Hollow (00116)
ElDorado Creek (00146)
Ferrier Gulch (10141)
Freezeout (10404)
Golden Eagle Mine (00108)
Gordon Gulch (00513)
Grove Road (10107)
Harper (00301)
Ironside Mountain East (00114)
Ironside Mountain West (00112)
Ironside School (10142)
Jamison (10106)
Jonseboro (00306)
Juniper Mountain (00134)
Keeney Creek (10401)
King Field Inc. (00136)
Kivett (00133)
Lava Ridge (10223)
Little Valley (10407)
Lockhart Mountain (00224)
Lodge (10901)
Lost Valley (00119)
Lower Owyhee (10502)
Lyman Creek (00111)
Mahogany Mountain (10509)
Malheur City (00130)
Malheur Reservoir (00118)
Malheur River (10219)
McCain Springs (10505)
McEwen (20603)
Middle Willow Creek (00121)
Mitchell Butte (10408)
North Harper (00402)
North Star Mountain (00310)
Nyssa (10403)
Oregon Canal (10209)
Phipps Creek East (00137)
Phipps Creek North (00139)
Phipps Creek West (00125)
Poall Creek (20103)
Post Creek (00244)
Quarry (00147)
Quartz Mountain (10406)
Radar Hill (10410)
Rail Canyon (10205)
Red Hills (10302)
Reservoir Butte (00110)
Richie Flat (10214)
Ring Butte (10208)
Road Gulch (00229)
Rockville (10508)
Schnable Creek (10510)
Scratch Post Butte (00228)
Shasta Butte (00154)
Sheep Corral Creek (00122)
South Alkali (20100)
South Star Mountain (00309)
South Willow Creek (00153)
Spring Mountain (10504)
Squaw Butte (00233)
Thorn Flat (00127)
Three Fingers (10503)
Tunnel Canyon (10512)
Turnbull (00303)
Vale Butte North (10409)
Vale Butte South (00413)
Venator (10605)
Wallrock (00405)
West Bench (20104)
West Clover Creek (10213)
West Oregon Canal (00230)
Westfall (00227)
Wheel Gulch (00149)
Whitley Canyon (10216)
Wickiup Gulch (00123)
Willow Basin (10222)
Willow Creek Livestock (20105)

Jordan Resource Area

15-Mile Community (01201)
Albisu-Alcorta (01304)
Ambrose-Maher (01102)
Anderson (01401)
Antelope (21002)
Antelope Individual (11011)
Arock (21001)
Barren Valley (10801)
Bighorn (11005)
Black Hill (01309)
Bogus Creek (10904)
Bowden Hills (10803)
Campbell (11306)
Cherry Creek (11014)
Coyote Lake (10804)
Crooked Creek (10806)
Danner Individual (11013)
East Cow Creek (10903)
Echave (21302)
Eiguren (11305)
Eiguren Individual (11006)
Gilbert (21301)
Jackies Butte Summer (01101)
Jackies Butte Winter (01103)
Little Antelope (11015)
Louse Canyon Community (01307)
McCormick (01202)
Miller Individual (11012)
Morcom (10907)
Oliver (10905)
Parsnip Peak (11009)
Rattlesnake (21003)
Rome Individual (11007)
Saddle Butte (20805)
Sheepheads (10702)
Sherburn (11303)
Skinner individual (11010)
Star Valley Community (01402)
Ten Mile (01308)
West Cow Creek (20902)
Whitehorse (11008)
Whitehorse Butte (01206)
Willow Creek (11004)
Wroten (11003)
Zimmerman (01203)

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Malheur Resource Area

BLM allotment name:	**GOLDEN EAGLE MINE**	**Allotment number:**	**00108**
Management category:	**C**	**BLM acres:**	**276**
AMP implemented:	**No**	**Private acres:**	**1,990**
Season of use:	**Undefined**	**State acres:**	**0**
Active AUM's:	**46**	**Other Federal acres:**	**0**
Suspended AUM's:	**0**		
Total AUM's:	**46**	**Total acres:**	**2,266**

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Golden Eagle	2266	12	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	20	5	5.1
Pronghorn	10	0	0.9
Elk	5	5	7

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Golden Eagle	Willow Creek	0.2	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**BRIDGE CREEK WEST**	**Allotment number:**	**00199**
Management category:	C	**BLM acres:**	40
Number of pasture(s):	1	**Private acres:**	820
AMP implemented:	No	**State acres:**	0
Season of use:	Undefined	**Other Federal acres:**	0
Active AUM's:	4		
Suspended AUM's:	0	**Total acres:**	860
Total AUM's:	4		

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bridge Creek	860	5	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	0	7.1
Pronghorn	0	0	0
Elk	10	0	7

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**RESERVOIR BUTTE**	**Allotment number:**	**00110**
Management category:	C	**BLM acres:**	943
AMP implemented:	No	**Private acres:**	9,261
Season of use:	Undefined	**State acres:**	617
Active AUM's:	61	**Other Federal acres:**	0
Suspended AUM's:	121		
Total AUM's:	182	**Total acres:**	14,564

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective ¹
Pastures identified in the annual grazing schedule					
Reservoir Butte	3742	4	Unknown	Unknown	J
South Reservoir Butte	10,822	9	Unknown	Unknown	J

¹ *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	10	17.3
Pronghorn	35	50	1.3
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited¹	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

¹ 1998 303(d) list.

BLM allotment name:	**LYMAN CREEK**	**Allotment number:**	**00111**
Management category:	C	**BLM acres:**	79
AMP implemented:	No	**Private acres:**	2,512
Season of use:	Undefined	**State acres:**	0
Active AUM's:	7	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	7	**Total acres:**	2,591

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Lyman Creek	2,591	3	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	0	15.3
Pronghorn	15	0	1.3
Elk	5	0	3.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

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BLM allotment name:	**IRONSIDE MOUNTAIN WEST**	**Allotment number:**	**00112**
Management category:	C	**BLM acres:**	1,050
AMP implemented:	No	**Private acres:**	3,837
Season of use:	Undefined	**State acres:**	0
Active AUM's:	124	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	124	**Total acres:**	4,887

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West	4,887	21	Late Native	Unknown	1

[1] *Current allotment management objectives:*

1) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage Demand (AUM)
Deer	75	0	15.3
Pronghorn	0	0	0
Elk	25	0	17.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
West	Waterfall Creek	0.2	Unkn							
West	Middle Fork Willow Creek	0.5	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**BOSTON HORSE CAMP**	Allotment number:	**00113**
Management category:	C	BLM acres:	708
AMP implemented:	No	Private acres:	1,420
Season of use:	Undefined	State acres:	0
Active AUM's:	83	Other Federal acres:	0
Suspended AUM's:	162		
Total AUM's:	245	Total acres:	2,128

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Boston Horse Camp	2,127	33	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	15	13.2
Pronghorn	0	0	0
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Boston Horse Camp	Cottonwood Creek-at reservoir	0.3	Static				0.3			

[1] 1998 303(d) list.

BLM allotment name:	**IRONSIDE MOUNTAIN EAST**	**Allotment number:**	**00114**
Management category:	C	**BLM acres:**	2,112
AMP implemented:	No	**Private acres:**	13,960
Season of use:	Undefined	**State acres:**	0
Active AUM's:	140	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	140	**Total acres:**	16,082

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East	16,126	13	Late Native	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage Demand (AUM)
Deer	300	0	61.1
Pronghorn	50	50	8.6
Elk	75	0	52.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
East	Bridge Creek	1.2	Unkn							

[1] 1998 303(d) list.

Special management areas:

Redband trout Special Status fish

BLM allotment name:	**COW VALLEY**	**Allotment number:**	**0115**
Management category:	C	**BLM acres:**	468
AMP implemented:	No	**Private acres:**	35,273
Season of use:	Undefined	**State acres:**	0
Active AUM's:	43	**Other Federal acres:**	0
Suspended AUM's:	37		
Total AUM's:	80	**Total acres:**	35,741

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Cow Valley	35,741	1	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	25	45.8
Pronghorn	75	75	12.9
Elk	250	50	21.0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**EAST MOORES HOLLOW**	**Allotment number:**	**0116**
Management category:	C	**BLM acres:**	639
AMP implemented:	No	**Private acres:**	4,245
Season of use:	Undefined	**State acres:**	0
Active AUM's:	54	**Other Federal acres:**	78
Suspended AUM's:	56		
Total AUM's:	110	**Total acres:**	4,962

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East Moores Hollow	4,962	13	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	125	40.8
Pronghorn	10	20	2.6
Elk	10	25	24.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**MALHEUR RESERVOIR**	**Allotment number:**	**0118**
Management category:	C	**BLM acres:**	346
AMP implemented:	No	**Private acres:**	2,594
Season of use:	Undefined	**State acres:**	0
Active AUM's:	56	**Other Federal acres:**	0
Suspended AUM's:	24		
Total AUM's:	80	**Total acres:**	2,940

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Malheur Reservoir	2,986	12	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	10	8.2
Pronghorn	25	50	6.4
Elk	10	25	24.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

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BLM allotment name:	**LOST VALLEY**	**Allotment number:**	**0119**
Management category:	C	**BLM acres:**	1,040
AMP implemented:	No	**Private acres:**	5,492
Season of use:	Undefined	**State acres:**	0
Active AUM's:	58	**Other Federal acres:**	0
Suspended AUM's:	152		
Total AUM's:	210	**Total acres:**	6,532

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Lost Valley	6,532	16	Unknown	Unknown	3

[1] *Current allotment management objectives:*

3) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	45	0	9.2
Pronghorn	5	0	0.4
Elk	10	0	7

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

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BLM allotment name:	**BOSWELL SPRING**	Allotment number:	**0120**
Management category:	C	BLM acres:	1,131
AMP implemented:	No	Private acres:	4,708
Season of use:	Undefined	State acres:	0
Active AUM's:	30	Other Federal acres:	0
Suspended AUM's:	90		
Total AUM's:	120	Total acres:	5,839

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Boswell Spring	5,839	19	Early Native	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	30	16.3
Pronghorn	5	5	0.9
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Boswell Spring	Willow Creek	0.5	Unkn		Yes					

[1] 1998 303(d) list.

BLM allotment name:	**MIDDLE WILLOW CREEK**	Allotment number:	**00121**
Management category:	C	BLM acres:	477
AMP implemented:	No	Private acres:	2,299
Season of use:	Undefined	State acres:	0
Active AUM's:	45	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	45	Total acres:	2,776

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Middle Willow Creek	2,776	17	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	10	8.2
Pronghorn	25	0	2.1
Elk	10	10	14

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**SHEEP CORRAL CREEK**	Allotment number:	**00122**
Management category:	C	BLM acres:	1,378
AMP implemented:	No	Private acres:	3,431
Season of use:	Undefined	State acres:	0
Active AUM's:	337	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	337	Total acres:	4,809

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Sheep Corral Creek	4,809	29	Late Native	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	75	25.5
Pronghorn	25	50	6.4
Elk	15	0	10.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

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BLM allotment name:	**WICKIUP GULCH**	Allotment number:	**00123**
Management category:	C	BLM acres:	855
AMP implemented:	No	Private acres:	3,290
Season of use:	Undefined	State acres:	0
Active AUM's:	118	Other Federal acres:	0
Suspended AUM's:	22		
Total AUM's:	140	Total acres:	4,145

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Gulch	4,145	21	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	75	25.5
Pronghorn	10	20	2.6
Elk	5	30	24.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BRIDGE GULCH**	Allotment number:	**00124**
Management category:	C	BLM acres:	3,931
AMP implemented:	No	Private acres:	1,854
Season of use:	Undefined	State acres:	0
Active AUM's:	169	Other Federal acres:	0
Suspended AUM's:	319		
Total AUM's:	488	Total acres:	5,789

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bridge	5,789	68	Unknown	Unknown	

[1] Current allotment management objectives:

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	125	40.8
Pronghorn	10	20	2.6
Elk	5	30	24.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**PHIPPS CREEK WEST**	**Allotment number:**	**06125**
Management category:	C	**BLM acres:**	1,732
AMP implemented:	No	**Private acres:**	1,404
Season of use:	Undefined	**State acres:**	0
Active AUM's:	155	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	155	**Total acres:**	3,136

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West	3,136	55	Early Native	Unknown	A

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	40	14.3
Pronghorn	25	50	6.4
Elk	5	15	12.6

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
West	Phipps Creek	0.5	Unkn							

[1] 1998 303(d) list.

82

BLM allotment name:	**THORN FLAT**	Allotment number:	**00127**
Management category:	M	BLM acres:	3,439
AMP implemented:	1981	Private acres:	610
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	987	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	987	Total acres:	4,049

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Black Creek	2,255	98	Early Native	Static	B
Gum Creek	1,793	68	Late Native	Staic-Up	A

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	50	20.4
Pronghorn	35	35	6.0
Elk	5	25	21

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[2]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[2] 1998 303(d) list.

BLM allotment name:	**CHALK BUTTE**	Allotment number:	**00128**
Management category:	C	BLM acres:	469
AMP implemented:	No	Private acres:	1,680
Season of use:	Undefined	State acres:	0
Active AUM's:	65	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	65	Total acres:	2,149

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Chalk Butte	2,149	22	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	10	15	6
Pronghorn	15	25	3.4
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**DRY GULCH**	Allotment number:	**00129**
Management category:	C	BLM acres:	902
AMP implemented:	No	Private acres:	1,114
Season of use:	Undefined	State acres:	0
Active AUM's:	62	Other Federal acres:	0
Suspended AUM's:	78		
Total AUM's:	140	Total acres:	2,016

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Dry	2,016	45	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	15	25	8.2
Pronghorn	0	0	0
Elk	5	5	7

Pastures with riparian and DEQ water quality considerations:1

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**MALHEUR CITY**	Allotment number:	**00130**
Management category:	M	BLM acres:	1,167
AMP implemented:	1987	Private acres:	256
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	289	Other Federal acres:	0
Suspended AUM's:	39		
Total AUM's:	328	Total acres:	1,423

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Malheur City	1,423	82	Early Native	Static	A

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	20	5	5.1
Pronghorn	15	30	3.9
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Malheur City	Shasta Gulch	1.8	Up							

[1] 1998 303(d) list.

BLM allotment name:	**BALDY MOUNTAIN**	Allotment number:	**00131**
Management category:	M	BLM acres:	3,421
AMP implemented:	1987	Private acres:	1,729
Season of use:	04/01–10/31	State acres:	0
Active AUM's:	520	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	520	Total acres:	5,150

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Baldy Mountain (includes land within Baker resource area)	5,150	63	Middle Native	Static	A

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	5	16.3
Pronghorn	30	15	3.9
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BULLY CREEK**	Allotment number:	**00132**
Management category:	M	BLM acres:	5,095
AMP implemented:	1982	Private acres:	7,281
Season of use:	10/15-04/15	State acres:	0
Active AUM's:	980	Other Federal acres:	482
Suspended AUM's:	0		
Total AUM's:	980	Total acres:	12,858

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bully Creek	12,858	40	Early Native	Up	A, E

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	800	200	57.1
Pronghorn	25	75	8.6
Elk	5	5	7

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**KIVETT**	Allotment number:	**00133**
Management category:	C	BLM acres:	243
AMP implemented:	No	Private acres:	3,188
Season of use:	Undefined	State acres:	0
Active AUM's:	26	Other Federal acres:	0
Suspended AUM's:	20		
Total AUM's:	46	Total acres:	3,431

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Kivett	3,431	7	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	0	10.2
Pronghorn	0	0	0
Elk	15	0	10.5

Pastures with riparian and DEQ water quality considerations:

					Water quality	Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Redband trout Special Status fish

BLM allotment name:	**JUNIPER MOUNTAIN**	Allotment number:	**00134**
Management category:	C	BLM acres:	788
AMP implemented[2]:	No	Private acres:	2,262
Season of use:	Undefined	State acres:	0
Active AUM's:	126	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	126	Total acres:	3,050

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Juniper	3,050	26	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	0	10.2
Pronghorn	0	0	0
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**DRY CREEK INDIVIDUAL**	**Allotment number:**	**00135**
Management category:	C	**BLM acres:**	2,058
AMP implemented:	No	**Private acres:**	2,820
Season of use:	Undefined	**State acres:**	0
Active AUM's:	99	**Other Federal acres:**	0
Suspended AUM's:	181		
Total AUM's:	280	**Total acres:**	4,878

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Dry Creek	4,878	42	Unknown	Unknown	J

[1] *Current allotment management objectives:*
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	100	30.6
Pronghorn	15	25	3.4
Elk	15	30	31.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**KING FIELD INDIVIDUAL**	Allotment number:	**00136**
Management category:	C	BLM acres:	1,085
AMP implemented:	No	Private acres:	4,995
Season of use:	Undefined	State acres:	0
Active AUM's:	61	Other Federal acres:	0
Suspended AUM's:	55		
Total AUM's:	116	Total acres:	6,080

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
King	6,080	18	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	40	100	28.5
Pronghorn	10	15	2.1
Elk	5	5	7

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Malheur forget-me-not Special Status plants

BLM allotment name:	**PHIPPS CREEK EAST**	Allotment number:	**00137**
Management category:	C	BLM acres:	601
AMP implemented:	No	Private acres:	2,612
Season of use:	Undefined	State acres:	0
Active AUM's:	35	Other Federal acres:	0
Suspended AUM's:	49		
Total AUM's:	84	Total acres:	3,213

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East	3,213	19	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	100	27.5
Pronghorn	10	50	5.1
Elk	5	25	21

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BOULDER CREEK**	Allotment number:	**00138**
Management category:	C	BLM acres:	357
AMP implemented:	No	Private acres:	4,994
Season of use:	Undefined	State acres:	0
Active AUM's:	31	Other Federal acres:	0
Suspended AUM's:	53		
Total AUM's:	84	Total acres:	5,351

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Boulder	5,351	7	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	70	5	15.3
Pronghorn	15	0	1.3
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Boulder	Milk Ranch Boulder Creek	0.7	Unkn							
Boulder	Mill Boulder Creek	0.5	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**PHIPPS CREEK NORTH**	Allotment number:	**00139**
Management category:	C	BLM acres:	3,711
AMP implemented:	No	Private acres:	2,572
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	734	Other Federal acres:	0
Suspended AUM's:	50		
Total AUM's:	784	Total acres:	6,283

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Mine Hill Pasture East	2,641	62	Middle Native	Down	A, J
Rim Rock	3,642	57	Middle Native	Down	A, J

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	100	30.6
Pronghorn	15	30	3.9
Elk	15	25	28

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Rim Rock	Phipps Creek	1.5	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**ALDER CREEK**	Allotment number:	**00143**
Management category:	C	BLM acres:	1,241
AMP implemented:	No	Private acres:	3,135
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	198	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	198	Total acres:	4,376

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Northwest	1,164	51	Potential Native	Unknown	A, J
Middle	1,101	24	Unknown	Unknown	A, J
North	762	5	Middle Native	Unknown	A, J
East	883	36	Middle Native	Unknown	A, J
Southwest	523	5	Middle Native	Unknown	A, J

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	5	7.1
Pronghorn	15	0	1.3
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**COW CREEK**	**Allotment number:**	**00144**
Management category:	C	**BLM acres:**	2,851
AMP implemented:	No	**Private acres:**	4,766
Season of use:	Undefined	**State acres:**	0
Active AUM's:	112	**Other Federal acres:**	0
Suspended AUM's:	218		
Total AUM's:	330	**Total acres:**	7,617

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Cow Creek	7,617	37	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	25	20.4
Pronghorn	25	25	4.3
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BRIDGE CREEK EAST**	Allotment number:	**00145**
Management category:	C	BLM acres:	952
AMP implemented:	No	Private acres:	7,586
Season of use:	Undefined	State acres:	0
Active AUM's:	78	Other Federal acres:	0
Suspended AUM's:	87		
Total AUM's:	165	Total acres:	8,538

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bridge Creek	2,852	3	Unknown	Unknown	J
South Bridge Creek	5,686	15	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	0	20.4
Pronghorn	0	0	0
Elk	20	0	14

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**ELDORADO CREEK**	Allotment number:	**00146**
Management category:	C (administered by Baker RA)	BLM acres:	354
AMP implemented:	No	Private acres:	1,123
Season of use:	Undefined	State acres:	0
Active AUM's:	31	Other Federal acres:	0
Suspended AUM's:	29		
Total AUM's:	60	Total acres:	1,477

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Eldorado	1,525	23	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	20	5	5.1
Pronghorn	15	30	3.9
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**QUARRY**	Allotment number:	**00147**
Management category:	C	BLM acres:	79
AMP implemented:	No	Private acres:	80
Season of use:	Undefined	State acres:	0
Active AUM's:	2	Other Federal acres:	0
Suspended AUM's:	13		
Total AUM's:	15	Total acres:	159

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
QUARRY	159	50	Unknown	Unknown	J

[1] *Current allotment management objectives:*

The 40 acre federal parcel is within a Federal Aid Material Site right-of-way; not available for grazing.

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	0	0	0
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BROGAN CANYON**	Allotment number:	**00148**
Management category:	I	BLM acres:	2,116
AMP implemented:	1992	Private acres:	1,158
Season of use:	04/01-10/15	State acres:	0
Active AUM's:	360	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	360	Total acres:	3,274

Pasture/area characteristics and objectives:

Pasture/Areas *Pastures identified in the annual grazing schedule*	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Lower Canyon	779	57	Unknown	Static	D
Upland	1,362	54	Middle Native	Up	A
Diversion Dam	225	84	Middle Native	Up	D
Smith Private	422	67	Early Native	Static	A,D
Chrome Mine	486	95	Early Native	Up	A,D

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	75	20.4
Pronghorn	25	25	4.3
Elk	5	20	17.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Lower Canyon	Willow Creek	1.2	Up		Yes					
Diversion Dam	Willow Creek	0.9	Up		Yes					
Smith Private	Willow Creek	0.4	Up		Yes					
Chrome Mine	Basin Creek	0.3	Up							
Chrome Mine	Willow Creek	1.3	Up		Yes					

[1] 1998 303(d) list.

BLM allotment name:	**WHEEL GULCH**	Allotment number:	**00149**
Management category:	C	BLM acres:	760
AMP implemented:	No	Private acres:	1,181
Season of use:	Undefined	State acres:	0
Active AUM's:	50	Other Federal acres:	22
Suspended AUM's:	32		
Total AUM's:	82	Total acres:	1,963

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Wheel	1,963	40	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	50	15.3
Pronghorn	5	15	1.7
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited [1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
(None known)										

[1] 1998 303(d) list.

BLM allotment name:	**BUTTERFIELD SPRING**	Allotment number:	**00150**
Management category:	C	BLM acres:	594
AMP implemented:	No	Private acres:	8,649
Season of use:	Undefined	State acres:	398
Active AUM's:	39	Other Federal acres:	0
Suspended AUM's:	35		
Total AUM's:	74	Total acres:	9,640

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Butter	9,640	6	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	100	30.6
Pronghorn	10	15	2.1
Elk	5	5	7

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Malheur forget-me-not Special Status plant

BLM allotment name:	**CANYON CREEK**	**Allotment number:**	**00151**
Management category:	C	**BLM acres:**	1,211
AMP implemented:	No	**Private acres:**	5,328
Season of use:	Undefined	**State acres:**	0
Active AUM's:	35	**Other Federal acres:**	0
Suspended AUM's:	25		
Total AUM's:	60	**Total acres:**	6,539

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Canyon	6,539	19	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of resource management plan:-

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	50	20.4
Pronghorn	5	5	0.9
Elk	5	20	17.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**CANAL**	Allotment number:	**00152**
Management category:	C	BLM acres:	435
AMP implemented:	No	Private acres:	1,190
Season of use:	Undefined	State acres:	0
Active AUM's:	16	Other Federal acres:	19
Suspended AUM's:	41		
Total AUM's:	57	Total acres:	1,644

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Canal	1,644	26	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	10	35	9.2
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

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BLM allotment name:	**SOUTH WILLOW CREEK**	**Allotment number:**	**00153**
Management category:	C	**BLM acres:**	1,669
AMP implemented:	No	**Private acres:**	5,148
Season of use:	Undefined	**State acres:**	0
Active AUM's:	85	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	85	**Total acres:**	6,817

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
South Willow	6,817	24	Late Native	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	0	15.3
Pronghorn	10	0	0.9
Elk	20	0	14

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**SHASTA BUTTE**	Allotment number:	**00154**
Management category:	C (Administered by Baker RA)	BLM acres:	236
AMP implemented:	No	Private acres:	3,650
Season of use:	Undefined	State acres:	0
Active AUM's:	21	Other Federal acres:	0
Suspended AUM's:	40		
Total AUM's:	61	Total acres:	3,886

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Shasta	3,886	6	Late Native	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	40	10	10.2
Pronghorn	25	0	2.1
Elk	50	50	70

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Shasta	Shasta Gulch	0.3	Static							

[1] 1998 303(d) list.

BLM allotment name:	**AGENCY MOUNTAIN**	Allotment number:	**00161**
Management category:	I	**BLM acres:**	4,149
AMP implemented:	No	**Private acres:**	3,185
Season of use:	04/01-10/31	**State acres:**	0
Active AUM's:	1,400	**Other Federal acres:**	879
Suspended AUM's:	0		
Total AUM's:	1,400	**Total acres:**	8,213

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Water Gulch	3,511	54		Middle Native	Static
Agency Mountain	2,299	88		Middle Native	Static
Angus	784	23		Middle Native	Static
Reservoir Field	786	14		Unknown	Unknown
Orchard	1,077	13		Unknown	Unknown

[1] *Current allotment management objectives:*

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	92	117	48
Pronghorn	25	0	20
Elk	28	30	262

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited [1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
(None known)										

[1] 1998 303(d) list.

Special management areas:

BLM allotment name:	**CALF CREEK**	**Allotment number:**	**00162**
Management category:	I	**BLM acres:**	18,381
AMP implemented:	No	**Private acres:**	0
Season of use:	03/01-10/31	**State acres:**	2,033
Active AUM's:	1,793	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	1,793	**Total acres:**	20,414

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective ¹
Pastures identified in the annual grazing schedule					
Stemler Basin	3,249	99	Late Native	Static	
Dishrag	7,183	100	Middle Native	Static	
Cave Creek	551	99	Early native	Static	
Lake Ridge	3,530	91	Late Native	Static-Up	
Lower Calf Creek	1,678	48	Late Native	Unknown	
Upper Calf Creek	830	89	Middle Native	Unknown	
Chalk Camp	2,247	76	Unknown	Unknown	
Areas not identified in the annual grazing schedule					
Cave Creek Stream Exclosure	450	99	Unknown	Unknown	
Grasshopper FFR	696	4	Unknown	Unknown	

[1] *Current allotment management objectives:*

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	91	116	47
Pronghorn	0	0	0
Elk	28	30	262

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited¹	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Dishrag	Warm Springs Creek	0.4	Static							
Cave Creek	Cave Canyon	0.6	Unkn							
Lower Calf Creek	Calf Creek	1.8	Up	REDB						
Upper Calf Creek	Calf Creek	0.4	Static	REDB						
Cave Creek STEX	Cave Canyon	1.4	Unkn							

[1] 1998 303(d) list.

Special management areas:

BLM allotment name:	**LOCKHART MOUNTAIN**	Allotment number:	**00224**
Management category:	C	BLM acres:	1,588
AMP implemented:	No	Private acres:	3,668
Season of use:	Undefined	State acres:	0
Active AUM's:	214	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	214	Total acres:	5,256

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Lockhart	5,256	30	Late Native	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	10	17.3
Pronghorn	15	0	1.3
Elk	15	0	10.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**CHUKAR PARK**	**Allotment number:**	**00225**
Management category:	C	**BLM acres:**	544
AMP implemented:	No	**Private acres:**	750
Season of use:	Undefined	**State acres:**	0
Active AUM's:	35	**Other Federal acres:**	61
Suspended AUM's:	46		
Total AUM's:	81	**Total acres:**	1,355

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Chukar Park	1,355	45	Unknown	Unknown	J
Areas not identified in the annual grazing schedule					
Chukar Park Campground	Unknown	100	Unknown	Unknown	L

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	75	20.4
Pronghorn	25	0	2.1
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Chukar Park STEX	North Fork Malheur River	0.3	Up	BUTR	Yes					

[1] 1998 303(d) list.

BLM allotment name:	**COTTONWOOD CREEK**	Allotment number:	**00226**
Management category:	C	BLM acres:	853
AMP implemented:	No	Private acres:	957
Season of use:	Undefined	State acres:	0
Active AUM's:	68	Other Federal acres:	0
Suspended AUM's:	124		
Total AUM's:	192	Total acres:	1,810

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Cottonwood Creek	1,810	47	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	5	6
Pronghorn	10	0	0.9
Elk	15	10	17.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Ott Mountain Proposed ACEC (Alternatives A, C, D, D2)

BLM allotment name:	**WESTFALL**	Allotment number:	**00227**
Management category:	M	BLM acres:	1,674
AMP implemented:	1990	Private acres:	4,943
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	327	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	327	Total acres:	6,617

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Westfall Seeding	6,617	25	Poor Seeding	Down	B

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	25	15.3
Pronghorn	5	5	0.9
Elk	10	20	21

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**SCRATCH POST BUTTE**	**Allotment number:**	**00228**
Management category:	C	BLM acres:	1,013
AMP implemented:	No	Private acres:	8,542
Season of use:	Undefined	State acres:	158
Active AUM's:	132	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	132	Total acres:	9,713

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Sctatch	9,713	10	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	65	15	16.3
Pronghorn	25	0	2.1
Elk	30	75	73.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**ROAD GULCH**	Allotment number:	**00229**
Management category:	C	BLM acres:	1,174
AMP implemented:	No	Private acres:	12
Season of use:	Undefined	State acres:	3,751
Active AUM's:	12	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	12	Total acres:	4,937

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Road Gulch	4,937	24	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	5	5.1
Pronghorn	5	5	0.9
Elk	5	10	10.5

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**WEST OREGON CANAL**	**Allotment number:**	**00230**
Management category:	C	**BLM acres:**	638
AMP implemented:	No	**Private acres:**	785
Season of use:	Undefined	**State acres:**	0
Active AUM's:	46	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	46	**Total acres:**	1,423

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West Oregon Canal	1,423	45	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	15	5	4
Pronghorn	5	0	0.4
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**SQUAW BUTTE**	**Allotment number:**	**00233**
Management category:	C	**BLM acres:**	289
AMP implemented:	No	**Private acres:**	1,914
Season of use:	Undefined	**State acres:**	0
Active AUM's:	35	**Other Federal acres:**	0
Suspended AUM's:	32		
Total AUM's:	67	**Total acres:**	2,203

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Squaw	2,210	13	Unknown	Unknown	J

[1] *Current allotment management objectives:*

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	5	5.1
Pronghorn	0	0	0
Elk	10	0	7

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**POST CREEK**	Allotment number:	**00244**
Management category:	C	BLM acres:	816
AMP implemented:	No	Private acres:	4,292
Season of use:	Undefined	State acres:	0
Active AUM's:	98	Other Federal acres:	0
Suspended AUM's:	222		
Total AUM's:	320	Total acres:	5,108

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Post	5,108	16	Unknown	Unknown	3

[1] Current allotment management objectives:

3) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	0	10.2
Pronghorn	15	0	1.3
Elk	10	0	7

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list

BLM allotment name:	**HARPER**	Allotment number:	**00301**
Management category:	I	BLM acres:	55,463
AMP implemented:	No	Private acres:	2,394
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	4,809	Other Federal acres:	445
Suspended AUM's:	1,130		
Total AUM's:	5,939	Total acres:	58,302

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Simmons Gulch	26,392	97	Late Native	Static	D
Shearing Plant	10,205	91	Early Native	Static	D
Rufino Butte	9,692	93	Late Native	Static	A
Indian Camp	10,455	98	Late Native	Static	A
Shearing Plant Stock Driveway	512	100	Early Native	Static	A
Areas not identified in the annual grazing schedule					
Squaw Creek Reservoir Exclosure	16	100	Unknown	Unknown	D,L
McCloud Reservoir Enclosure	4	100	Unknown	Unknown	K
Avery Creek Reservoir Enclosure	1	100	Late Native	Static	K
Perry FFR	1,025	58	Unknown	Unknown	J

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed reservoir enclosure with no management objective identified
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	150	51
Pronghorn	20	20	3.4
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Simmons Gulch	Gold Creek	5.4	Up	REDB						
Simmons Gulch	Malheur River	0.2	Up							
Simmons Gulch	Simmons Gulch	3.9	Up							
Simmons Gulch	South Fork Squaw Creek	2.3	Static							
Simmons Gulch	Spring Creek	2.1	Unkn							
Simmons Gulch	Squaw Creek	8.8	Up	REDB						

Shearing Plant	Cottonwood Creek	2.8	Up	REDB
Shearing Plant	Wildcat Creek	1.7	Unkn	
Perry FFR	Malheur River	0.9	Up	
Indian Camp Pasture	Keeney Creek	4.4	Unkn	

[1] 1998 303(d) list.

Special management areas:

Lake Ridge Proposed ACEC (Alternatives A, C, D, D2, and PRMP)

Cottonwood Creek Administratively suitable National Wild and Scenic Rivers (Alternative D)

BLM allotment name:	**TURNBULL**	Allotment number:	**00303**
Management category:	M	BLM acres:	80,147
AMP implemented:	No	Private acres:	26,206
Season of use:	04/01-01/31	State acres:	0
Active AUM's:	6,964	Other Federal acres:	345
Suspended AUM's:	0		
Total AUM's:	6,964	Total acres:	106,698

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Slaten	5,045	79	Late Native	Up	A
Juniper Mountain (includes Frying Pan and Dowell)	31,070	87	Middle Native	Static	B
Whiskey Spring (includes Private Land Pasture)	22,609	27	Middle Native	Static-Up	A
Clark Flat	26,356	85	Early Native	Static	A
Sand Basin	18,610	98	Middle Native	Static	A
Jackson Creek	1,243	98	Middle Native	Static	A
Areas not identified in the annual grazing schedule					
Rinehart Ranch	882	47	Middle Native	Static	B, J

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	175	50.9
Pronghorn	15	15	2.6
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Slaten	Butte Creek TR 6.3	0.3	Unkn							
Clark Flat	Burnt Flat Creek	1.9	Unkn							
Sand Basin	Jackson Creek	2.6	Unkn							

[1] 1998 303(d) list.

Special management areas:
Owyhee River existing ACEC (Alternatives B)
Owyhee National Wild and Scenic Rivers
Cedar Mountain WSA
Lower Owyhee WSA

BLM allotment name:	**BLACK BUTTE**	Allotment number:	**00304**
Management category:	I	BLM acres:	47,586
AMP implemented:	1992	Private acres:	3,208
Season of use:	04/01-10/31	State acres:	1,642
Active AUM's:	5,779	Other Federal acres:	858
Suspended AUM's:	0		
Total AUM's:	5,779	Total acres:	53,295

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Juntura Seeding	1,427	68	Good Seeding	Down	B
Butte	4,630	87	Late Native	Static-Down	A
Terry Basin	4,842	95	Middle Native	Up	B
Meeker Mountain	6,275	95	Late Native	Static	A
Juniper Basin	1,166	100	Good Seeding	Down	B
Potholes	10,253		Middle Native	Static-Down	E
Water Gulch	7,684	98	Late Native	Up	A
Sheep Rocks	3,905	87	Middle Native	Static	A
Parks	3,065	92	Middle Native	Static	E
McGetrick	2,079	66	Middle Native	Static	B
Weisner	4,107	6	Late Native	Unknown	D
Areas not identified in the annual grazing schedule					
Moritz	1,033	82	Early Native	Static	D
FFR	277	87	Unknown	Unknown	B, J
Riverside FFR	3,312	54	Unknown	Unknown	B, J
ODFW Headquarters Stream Exclosure	438	6	Unknown	Unknown	L
Riverside Recreation Site	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	450	500	193.6
Pronghorn	15	150	14.1
Elk	25	25	35

Within bighorn sheep range

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Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Moritz	Malheur River	1.0	Unkn		Yes					
Potholes	Warm Springs Reservoir	0.1	Up							
Sheep Rock	Malheur River	0.4	Up		Yes					
Weisner	Malheur River	0.9	Up		Yes					
Riverside FFR	Malheur River	0.1	Up		Yes					

[1] 1998 303(d) list.

Special management areas:

Malheur River Administratively suitable National Wild and Scenic Rivers (Alternative D)
Biddle's lupine Special Status plants

BLM allotment name:	**BRIDGE CREEK**	Allotment number:	**00305**
Management category:	M	BLM acres:	13,697
AMP implemented:	1973	Private acres:	1,628
Season of use:	04/01-11/30	State acres:	70
Active AUM's:	1,178	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	1,178	Total acres:	15,395

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Willow Spring	3,969	96	Middle Native	Static	E
Tables	5,242	100	Middle Native	Down	A, E
Dugout-Bridge Gulch	6,185	75	Middle Native	Static	E

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	355	112.1
Pronghorn	15	50	5.6
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Willow Spring	Bull Canyon	3.0	Unkn							
Tables	Bull Canyon	3.2	Unkn							

[1] 1998 303(d) list.

Special management areas:

Malheur River Administratively suitable National Wild and Scenic Rivers (Alternative D)

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BLM allotment name:	**JONESBORO**	Allotment number:	**00306**
Management category:	I	BLM acres:	20,169
AMP implemented:	1985	Private acres:	7,399
Season of use:	04/01-10/31	State acres:	238
Active AUM's:	2,661	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	2,661	Total acres:	27,806

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Sperry Creek	2,020	99	Middle Native	Down	A, E
Indian Creek	2,715	77	Middle Native	Unknown	A, E
Trail Creek	5,611	65	Middle Native	Static	A, E
Saddle Horse	5,381	97	Middle Native	Up	A, E
Horse Camp	2,891	56	Early Native	Static	A
Antelope Swales	911	100	Middle Native	Static	B, E
Dinner Creek	3,571	100	Early Native	Up	A
Tims Peak	688	20	Middle Native	Up	B, E
Areas not identified in the annual grazing schedule					
Canyon Creek Stream Exclosure	90	100	Early Native	Up	L
Canyon Creek Reservoir Exclosure	3	100	Early Native	Up	L
Hunter Creek Riparian Exclosure	564	100	Early Native	Up	L
Horse Camp FFR	766	14	Unknown	Unknown	J
Jonesboro FFR	2,595	7	Middle Native	Unknown	J

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

J) Pasture dominated by private land and managed custodial with no specified management objective

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	500	142.6
Pronghorn	15	25	3.4
Elk	50	50	70

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Horse Camp	Hunter Creek	1.3	Down							
Dinner Creek	Canyon Creek	0.9	Unkn	REDB						

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Dinner Creek	Canyon Creek	0.4	Up	REDB
Dinner Creek	Dinner Creek	1.9	Unkn	
Dinner Creek	Hunter Creek	0.1	Down	
Hunter Creek Stream EX	Canyon Creek	0.1	Down	REDB
Hunter Creek Stream EX	Hunter Creek	1.7	Down	
Hunter Creek Stream EX	Hunter Creek	0.1	Up	
Canyon Creek Stream EX	Canyon Creek	0.2	Unkn	REDB
Canyon Creek Stream EX	Canyon Creek	0.4	Up	REDB

[1] 1998 303(d) list.

Special management areas:

Canyon Creek Administratively suitable National Wild and Scenic Rivers (Alternative D)
Camp Creek Group WSAs

BLM allotment name:	**BONEY BASIN**	Allotment number:	**00307**
Management category:	M	BLM acres:	16,036
AMP implemented:		Private acres:	5,227
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	2,662	Other Federal acres:	15
Suspended AUM's:	0		
Total AUM's:	2,662	Total acres:	21,278

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Lower Field	10,074	85	Middle Native	Static	E
Private	4,944	28	Middle Native	Static-Up	B
Upper Field	7,259	98	Middle Native	Static-Up	A

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	350	112.1
Pronghorn	15	15	2.6
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Lower Field	Chalk Canyon	3.4	Unkn							
Lower Field	Conroy Canyon	1.8	Unkn							
Lower Field	Hunter Creek	2.3	Up							

[1] 1998 303(d) list.

Special management areas:

South Bull Canyon Proposed ACEC (Alternatives A, C, D, D2, PRMP)

BLM allotment name:	**BUTTE**	Allotment number:	**00308**
Management category:	M	BLM acres:	27,307
AMP implemented:	1985	Private acres:	1,192
Season of use:	04/01-10/31	State acres:	128
Active AUM's:	2,056	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	2,056	Total acres:	28,627

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North Racehorse	4,923	90	Middle Native	Static-Up	A
South Racehorse	7,515	96	Middle Native	Unknown	A, D, E
North Butte Creek	4,532	91	Middle Native	Static	B
Middle Butte Creek	6,924	100	Middle Native	Static	B
South Butte Creek	4,732	98	Late Native	Static-Up	B
Areas not identified in the annual grazing schedule					
East Copeland Reservoir Enclosure	Unknown	100	Unknown	Unknown	K
Racehorse Seeding Enclosure	Unknown	100	Unknown	Unknown	A

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
K) Grazed reservoir enclosure with no management objective identified

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	200	71.3
Pronghorn	25	25	4.3
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
South Racehorse	Cottonwood Creek	1.3	Unkn	REDB						
South Racehorse	Squaw Creek	2.5	Up	REDB						
North Butte Creek	Butte Creek	2.1	Unkn							
North Butte Creek	Wildcat Creek	0.2	Unkn							

[1] 1998 303(d) list.

Special management areas:
Dry Creek Administratively suitable National Wild and Scenic Rivers (Alternatives D)
Dry Creek Gorge Proposed ACEC (Alternative D, D2)
Malheur fiddleneck Special Status plant

BLM allotment name:	**SOUTH STAR MOUNTAIN**	**Allotment number:**	**00309**
Management category:	I	**BLM acres:**	49,757
AMP implemented:	1991	**Private acres:**	7,323
Season of use:	04/01-01/31	**State acres:**	0
Active AUM's:	5,394	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	5,394	**Total acres:**	57,080

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Granite Creek	3,879	99	Late Native	Static	A
Horse Queen	4,662	100	Late Native	Static	A
Atturbury	9,620	82	Middle Native	Static	B
West Chapman	6,153	99	Late Native	Static-Down	A
East Chapman	7,738	79	Late Native	Unknown	A
Road Canyon	16,092	78	Late Native	Static	A
Creston Brush Control	5,241	97	Late Native	Static-Down	A
Canyon	3,694	97	Late Native	Up	D

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	450	200	132.5
Pronghorn	75	25	8.6
Elk	25	25	35

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Atturbury	Crowley Creek	1.6	Unkn							
Road Canyon	Little Crowley Creek	2.3	Unkn							
Road Canyon	Little Crowley Creek TR 2.0	2.1	Unkn							
Road Canyon	Road Canyon	0.7	Down							
Creston Brush Control	Granite Creek	1.8	Unkn							
Canyon	Granite Creek	2.3	Up							

[1] 1998 303(d) list.

Special management areas:

Barren Valley Collomia Special Status plant

BLM allotment name:	**NORTH STAR MOUNTAIN**	**Allotment number:**	**00310**
Management category:	M	**BLM acres:**	91,702
AMP implemented:	1987	**Private acres:**	6,319
Season of use:	04/01-10/31	**State acres:**	3,788
Active AUM's:	9,030	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	9,030	**Total acres:**	101,809

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Slaughter Gulch	14,811	96	Late Native	Down	A
Cottonwood Basin	8,040	97	Late Native	Static	A
Monument	32,336	94	Late Native	Static	B
Wildcat Coldspring	35,855	83	Middle Native	Down	A
Basque	9,380	93	Potential Native	Unknown	D
Upper Meadows Seeding	550	100	Unknown	Unknown	J
Areas not identified in the annual grazing schedule					
Arrien FFR	836	6	Unknown	Static	A
Upper Meadows Reservoir Exclosure	1	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	450	100	112.1
Pronghorn	125	25	12.9
Elk	25	25	35

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Monument	Skull Creek	3.3	Unkn							
Wildcat Coldspring	Butte Creek TR 6.3	7.1	Unkn							
Wildcat Coldspring	Coldspring Creek	6.2	Unkn							
Wildcat Coldspring	Coldspring Creek TR 0.3	4.1	Unkn							
Wildcat Coldspring	Wildcat Creek	3.4	Unkn							

Wildcat Coldspring	**Wildcat Creek TR 5.4**	0.3	Unkn	
Basque	**Malheur River**	1.4	Up	Yes

[1] 1998 303(d) list.

Special management areas:

Cold Springs Wild horse management area (HMA)

BLM allotment name:	**NORTH HARPER**	Allotment number:	**00402**
Management category:	M	BLM acres:	28,928
AMP implemented:	1982	Private acres:	2,396
Season of use:	04/01-10/15	State acres:	0
Active AUM's:	4,208	Other Federal acres:	209
Suspended AUM's:	0		
Total AUM's:	4,208	Total acres:	31,533

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Needham Well	5,045	87	Early Native	Static-Up	A
North Harper Seeding West	2,237	98	Fair Seeding	Down	E
North Harper Seeding East	2,093	100	Good Seeding	Static	E
Johnson Gulch	5,560	92	Early Native	Static	A
West Canal	4,429	81	Early Native	Static	A
Boulevard Seeding	2,310	85	Early Native	Static-Down	
East Cow Hollow	1,081	100	Middle Native	Down	E
Lincoln Bench	5,544	95	Early Native	Static	A
West Page Seeding	1,003	100	Good Seeding	Static-Down	E
East Page Seeding	1,267	100	Good Seeding	Static-Down	E
Areas not identified in the annual grazing schedule					
Dunlevy-Sayer Botanical Exclosure	569	100	Unknown	Unknown	L
Needham Well/Lincoln Bench Botanical Exclosures	Unknown	100	Unknown	Unknown	L
Keeney Pass Interpretive Site	74	100	Unknown	Unknown	L
FFR	321	100	Unknown	Unknown	J

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

J) Pasture dominated by private land and managed custodial with no specified management objective

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	75	25.5
Pronghorn	90	90	15.4
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	**Stream**	**Miles**	**Trend**	**Fish**	**Water quality limited[1]**	**PFC**	**FARU**	**FARN**	**FARD**	**NF**
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Oregon Trail Proposed ACEC (Alternatives A, C, D, D2, PRMP)

Malheur forget-me-not, Mulford's milkvetch Special Status plants

BLM allotment name:	**WALLROCK**	Allotment number:	**00405**
Management category:	M	BLM acres:	87,014
AMP implemented:	1990	Private acres:	676
Season of use:	03/01-02/28	State acres:	81
Active AUM's:	6,656	Other Federal acres:	4,035
Suspended AUM's:	0		
Total AUM's:	6,656	Total acres:	91,807

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Dry Creek Butte	48,698	91	Middle Native	Static-Up	B
West Juniper	15,825	98	Middle Native	Static	A
Schaeffer	17,716	99	Late Native	Static	B
North McNulty	4,254	99	Early Native	Static	A
Hub Field	2,076	97	Middle Native	Static-Up	A
Antelope Flat Seeding	3,238	100	Fair Seeding	Down	B
Areas not identified in the annual grazing schedule					
Page Place FFR	412	44	Middle Native	Static	J

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	300	101.9
Pronghorn	100	125	19.3
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
West Juniper	Dry Creek	0.8	Unkn	REDB						
West Juniper	Juniper Creek	2.7	Unkn							
Schaeffer	Juniper Creek	0.3	Unkn							
McNulty North	Juniper Creek	0.2	Unkn							

[1] 1998 303(d) list.

Special management areas:

Dry Creek Gorge Proposed ACEC (Alternatives C, D, D2, PRMP)
Owyhee Views Proposed ACEC (Alternatives C, D, D2, PRMP)
Sand Hammond Hills Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Dry Creek Administratively suitable National Wild and Scenic Rivers (Alternatives C, D, D2, PRMP)
Dry Creek WSA
Dry Creek Buttes WSA
Seeding condition
Sterile milkvetch, Cusick's chaenactis Special Status plants

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BLM allotment name:	**VALE BUTTE SOUTH**	Allotment number:	**00413**
Management category:	C	BLM acres:	278
AMP implemented:	No	Private acres:	0
Season of use:	Undefined	State acres:	0
Active AUM's:	36	Other Federal acres:	0
Suspended AUM's:	36		
Total AUM's:	72	Total acres:	278

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
South Vale Butte	278	100	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	15	25	8.2
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**GORDON GULCH**	**Allotment number:**	**00513**
Management category:	I	**BLM acres:**	1,771
AMP implemented:	No	**Private acres:**	0
Season of use:	10/01-12/01; 02/01-05/01	**State acres:**	0
Active AUM's:	161	**Other Federal acres:**	42
Suspended AUM's:	119		
Total AUM's:	280	**Total acres:**	1,813

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Gordon Gulch	1,813	98	Late Native	Static-Down	B, D

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	75	22.4
Pronghorn	15	0	1.3
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Gordon Gulch	Birch Creek	2.6	Static							
Gordon Gulch	Indian Creek	2.0	Static							

[1] 1998 303(d) list.

Special management areas:
Wildhorse Basin WSA

BLM allotment name:	**JAMIESON**	**Allotment number:**	**10106**
Management category:	C	**BLM acres:**	82
AMP implemented:	No	**Private acres:**	281
Season of use:	Undefined	**State acres:**	0
Active AUM's:	5	**Other Federal acres:**	0
Suspended AUM's:	19		
Total AUM's:	24	**Total acres:**	363

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Jamison	364	23	Unknown	Unknown	

[1] Current allotment management objectives:

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	40	13.2
Pronghorn	0	20	1.7
Elk	5	20	17.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**GROVE ROAD**	Allotment number:	**10107**
Management category:	C	BLM acres:	397
AMP implemented:	No	Private acres:	4,365
Season of use:	Undefined	State acres:	0
Active AUM's:	22	Other Federal acres:	0
Suspended AUM's:	42		
Total AUM's:	64	Total acres:	4,762

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Grove	4,762	8	Unknown	Unknown	

[1] Current allotment management objectives:

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	100	30.6
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BECKER CREEK**	Allotment number:	**10117**
Management category:	C	BLM acres:	3,374
AMP implemented:	No	Private acres:	10,863
Season of use:	Undefined	State acres:	0
Active AUM's:	92	Other Federal acres:	0
Suspended AUM's:	475		
Total AUM's:	567	Total acres:	14,237

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Becker Creek	14,237	24	Unknown	Unknown	

[1] Current allotment management objectives:

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	150	45.8
Pronghorn	25	50	6.4
Elk	25	25	35

Pastures with riparian and DEQ water quality considerations:

					Water		Proper functioning condition			
					quality		assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Snake River goldenweed Special Status plant

BLM allotment name:	**COTTONWOOD CREEK**	**Allotment number:**	**10140**
Management category:	I	**BLM acres:**	738
AMP implemented:	1990	**Private acres:**	623
Season of use:	winter / early spring	**State acres:**	0
Active AUM's:	38	**Other Federal acres:**	0
Suspended AUM's:	49		
Total AUM's:	87		
		Total acres:	1,361

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Cottonwood Creek	1,361	54	Early Native	Up	D

[1] Current allotment management objectives:
D) Maintain/improve the condition of riparian vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	125	30.6
Pronghorn	0	10	0.9
Elk	5	50	38.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Cottonwood Creek	Cottonwood Creek	1.0	Up			0.8	0.1	0.1		

[1] 1998 303(d) list.

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BLM allotment name:	**FERRIER GULCH**	Allotment number:	**10141**
Management category:	C	BLM acres:	354
AMP implemented:	No	Private acres:	4,232
Season of use:	Undefined	State acres:	0
Active AUM's:	28	Other Federal acres:	0
Suspended AUM's:	26		
Total AUM's:	54	Total acres:	4,586

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Ferrier	4,586	8	Unknown	Unknown	

[1] Current allotment management objectives:

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	45	0	9.2
Pronghorn	15	0	1.3
Elk	10	0	7

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**IRONSIDE SCHOOL**	**Allotment number:**	**10142**
Management category:	C	**BLM acres:**	79
AMP implemented:	No	**Private acres:**	1,254
Season of use:	Undefined	**State acres:**	0
Active AUM's:	4	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	4	**Total acres:**	1,333

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Ironside	1,333	6	Unknown	Unknown	B

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	10	8.2
Pronghorn	15	0	1.3
Elk	15	15	21

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**AMELIA BUTTE**	**Allotment number:**	**10155**
Management category:	C (administered by Baker RA)	**BLM acres:**	797
AMP implemented:	No	**Private acres:**	5,229
Season of use:	04/01-04/30	**State acres:**	0
Active AUM's:	13	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	13	**Total acres:**	6,026

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Amelia	6,026	13	Unknown	Unknown	B

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer			
Pronghorn	15	25	3.4
Elk			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**ALLOTMENT #2**	Allotment number:	**10201**
Management category:	I	BLM acres:	48,499
AMP implemented:	1994	Private acres:	7,665
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	7,480	Other Federal acres:	371
Suspended AUM's:	1,320		
Total AUM's:	8,800	Total acres:	56,535

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Mesa	5,582	100	Late Native	Static-Up	B
Harper Seeding	3,000	96	Poor Seeding	Static	B
North Bully Creek	5,402	98	Middle Native	Static-Down	D
Wildhorse	9,805	75	Early Native	Static	A
South NG Seeding	4,529	98	Fair Seeding	Static-Down	B
Bully Creek Seeding	2,697	89	Poor Seeding	Static-Down	A
North NG Seeding	3,395	100	Good Seeding	Static-Down	B
Mountain	10,933	100	Middle Native	Static-Up	A
Holding	1,472	89	Early Native	Unknown	A
Dry Creek	1,871	89	Early Native	Unknown	A
Areas not identified in the annual grazing schedule					
NG Creek Riparian	568	100	Unknown	Unknown	L
Cottonwood Wildlife Stream Exclosure	497	86	Unknown	Unknown	L
Jordan FFR	5,271	21	Early Native	Unknown	J
FFR	538	25	Early Native	Unknown	J
NG Wildlife Area	119	100	Unknown	Unknown	L
NG Holding	319	100	Early Native	Unknown	A
North Bully Holding	91	100	Unknown	Unknown	none
0201 Riparian Stream Exclosure	446	100	Unknown	Unknown	L
Cottonwood Rehab Stream Exclosure	Unknown	100	Unknown	Unknown	AD

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	400	122.3
Pronghorn	10	50	5.1
Elk	15	50	45.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF	
North Bully Creek	Bully Creek	3.0	Unkn		Yes	3.0					
North Bully Creek	Bully Creek TR 24.0	0.6	Unkn				0.6				
North Bully Creek	NG Creek	0.6	Up			0.6					
North NG Seeding	NG Creek	2.5	Unkn			1.1	1.4				
Mountain	Cottonwood Creek- at Reservoir	4.0	Static			1.2	2.0				0.8
Mountain	Solders Canyon	1.4	Unkn					1.4			
Mountain	East Prong Dry Creek	4.5	Down					2.7	1.8		
Mountain	NG Creek	4.8	Down			0.8		0.5	3.5		
NG Creek Riparian	NG Creek	1.2	Down						1..2		
Cottonwood Wildlife STEX	NG Creek	0.5	Up			0.3	0.2				
Cottonwood Wildlife STEX	Cottonwood Creek	0.6	Up			0.6					
FFR	NG Creek	0.6	Up				0.6				
FFR	Swede Flat Creek	0.7	Unkn				0.7				
NG Holding	NG Creek	0.7	Unkn				0.7				
NG Holding	Cottonwood Creek- At Reservoir	0.3	Up			0.3					
0201 Riparian STEX	Cottonwood Creek- At Reservoir	1.9	Up			1.9					

[1] 1998 303(d) list.

Special management areas:

Allotment has not been grazed at full authorized levels for several years

BLM allotment name:	**ALLOTMENT #3**	Allotment number:	**10202**
Management category:	I	BLM acres:	77,695
AMP implemented:	1993	Private acres:	15,116
Season of use:	04/01-10/31	State acres:	94
Active AUM's:	13,480	Other Federal acres:	0
Suspended AUM's:	607		
Total AUM's:	14,087	Total acres:	92,906

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Jones	11,881	87	Late Native	Static-Up	B
North Black Canyon	5,915	93	Middle Native	Static-Down	A
South Black Canyon	8,153	99	Middle Native	Static-Down	A
East Cottonwood Seeding	2,507	100	Good Seeding	Static-Down	B
West Cottonwood Seeding	4,817	99	Good Seeding	Down	B
Ke;say Butte	707	98	Late Native	Static-Up	A
Swamp Creek Seeding	4,379	92	Fair Seeding	Static-Down	A
North Gregory Creek	6,696	96	Middle Native	Static	A
Indian Creek	3,800	89	Unknown	Static-Up	B
South Gregory Creek	6,015	100	Middle Native	Static-Down	A
North Studhorse	10,108	92	Middle Native	Static-Up	B
South Studhorse	5,324	100	Late Native	Static-Down	B
Lower Pole Creek	3,113	71	Middle Native	Static-Up	D
Areas not identified in the annual grazing schedule					
Becker Horse Camp FFR	3,076	26	Middle Native	Unknown	J
Wilson Creek FFR	274	57	Middle Native	Unknown	J
Hanna Station FFR	2,081	37	Middle Native	Unknown	J
Upper Pole Creek FFR	6,564	69	Middle Native	Unknown	J
West Creek FFR	1,943	9	Middle Native	Unknown	J
Dice FFR	960	16	Middle Native	Unknown	J
Becker FFR	1,597	48	Middle Native	Unknown	J
Westfall FFR	2,123	72	Middle Native	Unknown	J
Pence Spring Exclosure	2	100	Unknown	Unknown	L
Allotment #3 Reservoir Exclosure	11	100	Unknown	Unknown	L
Zotto Reservoir Exclosure	71	100	Unknown	Unknown	L
Cooper Reservoir	5	54	Unknown	Unknown	K
Gregory Creek Reservoir	12	100	Unknown	Unknown	K
South Gregory Creek Reservoir	14	100	Unknown	Unknown	K
Big Flat Reservoir	9	100	Unknown	Unknown	K

FFR	849	27	Unknown	Unknown	J
South Fork Indian Creek Stream Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed reservoir enclosure with no management objective identified
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	600	300	183.4
Pronghorn	50	0	4.3
Elk	30	75	73.5

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF	
Jones	Cottonwood Creek	4.8	Static				4.8				
Jones	Cottonwood Creek TR 10.0	3.1	Unkn					3.1			
Jones	Cottonwood Creek TR 12.0	3.2	Unkn			3.2					
Jones	South Fork Cottonwood Creek TR 3.7	0.8	Unkn			0.8					
Jones	West Fork Cottonwood Creek	0.1	Static	REDB		0.1					
North Black Canyon	Cottonwood Creek	3.4	Static	REDB							3.4
North Black Canyon	Cottonwood Creek TR 10.0	1.3	Unkn					1.3			
North Black Canyon	South Fork Cottonwood Creek	0.6	Unkn	REDB							0.6
North Black Canyon	West Fork Cottonwood Creek	2.5	Static	REDB		1.1					1.4
South Black Canyon	South Fork Cottonwood Creek TR 1.9 TR 0.8	0.7	Unkn			0.7					
South Black Canyon	South Fork Cottonwood Creek TR 2.2	1.6	Unkn			1.6					
South Black Canyon	South Fork Cottonwood Creek TR 3.0	1.3	Unkn			1.3					
South Black Canyon	South Fork Cottonwood Creek	3.2	Unkn	REDB		2.4					0.8
South Black Canyon	South Fork Cottonwood Creek TR 1.9	1.7	Unkn			1.7					
South Black Canyon	South Fork Cottonwood Creek TR 3.7	1.3	Unkn			1.3					
East Cottonwood Seeding	Willow Spring Creek	1.1	Unkn								
West Cottonwood Seeding	Willow Spring Creek	0.4	Unkn								
Swamp Creek Seeding	Cottonwood Creek	0.7	Up				0.3				0.4
Swamp Creek Seeding	Indian Creek	2.1	Static				0.9		1.2		

Swamp Creek Seeding	Swamp Creek	2.4	Static						2.4	
North Gregory Creek	Gregory Creek	4.3	Unkn			1.9		0.6		1.8
North Gregory Creek	Gregory Creek TR 4.4	1.1	Unkn			1.1				
North Gregory Creek	Gregory Creek TR 6.4	1.2	Unkn			1.2				
Indian Creek	South Fork Indian Creek	1.9	Up	REDB		1.9				
Indian Creek	South Fork Indian Creek	1.9	Unkn	REDB					0.6	1.3
Indian Creek	South Fork Indian Creek TR 7.2	0.2	Unkn	REDB		0.2				
South Gregory Creek	Gregory Creek TR 4.4 TR 1.8	0.5	Unkn					0.5		
South Gregory Creek	West Fork Cottonwood Creek	1.9	Static	REDB		1.9				
South Gregory Creek	Gregory Creek	1.0	Unkn					1.0		
South Gregory Creek	Gregory Creek TR 4.4	0.7	Unkn					0.7		
South Gregory Creek	Swamp Creek	2.2	Static					2.2		
North Studhorse	South Fork Indian Creek	0.9	Unkn	REDB					0.9	
North Studhorse	South Fork Indian Creek TR 7.2 TR 2.3	0.1	Unkn			0.1				
North Studhorse	South Fork Indian Creek TR 7.2	1.9	Unkn	REDB		1.2		0.7		
North Studhorse	South Fork Indian Creek TR 7.2 TR 1.3	1.5	Unkn			1.5				
North Studhorse	South Fork Indian Creek TR 7.2 TR 2.3	1.1	Unkn			1.1				
South Studhorse	West Fork Cottonwood Creek	2.0	Static	REDB				2.0		
Lower Pole Creek FFR	Pole Creek	2.0	Up	REDB	Yes	0.6	1.4			
Wilson Creek FFR	South Fork Indian Creek	0.2	Up			0.2				
Wilson Creek FFR	South Fork Indian Creek TR 5.1	0.1	Unkn							
Hanna Station FFR	North Fork Indian Creek	0.1	Unkn				0.1			
Upper Pole Creek FFR	West Fork Cottonwood Creek TR 7.0	1.6	Unkn							1.6
Upper Pole Creek FFR	Pole Creek	0.3	Unkn	REDB	Yes					
West Creek FFR	Indian Creek	0.2	Unkn							
Dice FFR	Cottonwood Creek	0.4	Static	REDB						0.4
Westfall FFR	Gregor y Creek	1.8	Unkn							1.8
Zotto RSEX	South Fork Indian Creek TR 5.1	0.2	Unkn							
Unallocated	Swamp Creek	0.2	Static							

¹ 1998 303(d) list.

Special management areas:

Black Canyon Creek Administratively suitable National Wild and Scenic Rivers (Alternative D)

South Fork Indian Creek Administratively suitable National Wild and Scenic Rivers(Alternative D)

BLM allotment name:	**ALLOTMENT #4**	Allotment number:	**10203**
Management category:	M	BLM acres:	57,105
AMP implemented:	1985	Private acres:	499
Season of use:	04/01-10/31	State acres:	93
Active AUM's:	5,502	Other Federal acres:	693
Suspended AUM's:	0		
Total AUM's:	5,502	Total acres:	58,390

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West Willow Creek Seeding	2,482	100	Fair seeding	Down	A
East Willow Creek Seeding	3,170	100	Fair seeding	Static	A
North Gravel	8,290	100	Middle native	Static	A
South Gravel	7,793	96	Middle native	Static-Up	A
North Chicken Creek Seeding	2,195	100	Fair seeding	Static	A
West Mid Chicken Creek Seeding	1,673	100	Fair seeding	Down	A
East Mid Chicken Creek Seeding	2,182	90	Fair Seeding	Static	A
South Chicken Creek Seeding	2,845	97	Fair Seeding	Down	A
Hog Creek	10,404	100	Late Native	Static-Up	B
West Miller Creek	9,935	99	Late Native	Static-Up	A
East Miller Creek	6,299	98	Late Native	Static-Down	D
Areas not identified in the annual grazing schedule					
South Cottonwood Reservoir Exclosure	24	100	Unknown	Unknown	L
Coyne Riparian Stream Exclosure	285	44	Unknown	Unknown	L
Pats Reservoir Exclosure	8	100	Unknown	Unknown	L
Hog Creek Stream Exclosure	804	100	Unknown	Unknown	L
Sheep Spring Reservoir Exclosure	Unknown	100	Uknown	Unknown	L
Chicken Creek Noodlebowl Exclosure	Unknown	100	Unknown	Unknown	L
Malheur Fiddleneck Botanical Ex #1, Ex #2, Ex #3 and Ex #4	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	300	600	183.4
Pronghorn	50	50	8.6
Elk	30	50	56

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Within bighorn sheep range										
Hog Creek	South Fork Cottonwood Creek	2.2	Unkn			2.2				
Hog Creek	Hog Creek	7.1	Unkn							
West Miller Creek	Black Canyon	1.1	Static	REDB						
West Miller Creek	Black Canyon	0.9	Up	REDB						
East Miller Creek	Hog Creek	2.4	Static	REDB						
South Cottonwood Re-seeding	South Fork Cottonwood Creek	0.3	Static			0.3				
Coyne Riparian STEX	Malheur River	0.5	Up							
Coyne Riparian STEX	Spring Creek	0.1	Unkn							
Hog Creek STEX	Hog Creek	1.7	Up	REDB						

[1] 1998 303(d) list.

Special management areas:

Hog Creek Wild horse management area (HMA)
Sage grouse habitat
Malheur fiddleneck Special Status plants
Black Canyon Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Black Canyon Creek Administratively suitable National Wild and Scenic Rivers (Alternative D)

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BLM allotment name:	**ALLOTMENT #6**	**Allotment number:**	**10204**
Management category:	M	**BLM acres:**	6,824
AMP implemented:	1986	**Private acres:**	356
Season of use:	03/15-05/15; 09/01-11/15	**State acres:**	0
Active AUM's:	1,201	**Other Federal acres:**	311
Suspended AUM's:	339		
Total AUM's:	1,540	**Total acres:**	7,491

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Juniper Gulch	7,409	95	Middle Native	Up	A, D
Areas not identified in the annual grazing schedule					
Malheur River Stream Exclosure	83	96	Unknown	Unknown	L

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	200	71.3
Pronghorn	0	0	0
Elk	10	20	21

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Juniper Gulch	Malheur River	0.5	Unkn							
Malheur River STEX	Malheur River	1.3	Up							

[1] 1998 303(d) list.

BLM allotment name:	**RAIL CANYON**	**Allotment number:**	**10205**
Management category:	I	**BLM acres:**	22,641
AMP implemented:	1995	**Private acres:**	3,879
Season of use:	04/01-10/31	**State acres:**	0
Active AUM's:	3,023	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	3,023	**Total acres:**	26,520

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West Rock Creek	1,870	92	Middle Native	Static-Down	A
East Chastain	2,151	99	Middle Native	Static	A
West Chastain	3,647	83	Middle Native	Static	A
Kitten Canyon	6,193	99	Middle Native	Up	A
East Crow Creek	4,434	99	Late Native	Up	D
West Crow Creek	3,021	99	Late Native	Up	A
East Rock Creek	627	99	Middle Native	Unknown	
Areas not identified in the annual grazing schedule					
Home FFR	1,643	41	Early Native	Up	J
Lost Creek FFR	2,429	34	Late Native	Unknown	J
FFR	502	32	Unknown	Unknown	J

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	25	56
Pronghorn	0	0	0
Elk	30	0	21

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
West Rock Creek	North Fork Bully Creek	0.1	Unkn					0.1		
East Chastain	North Fork Bully Creek	1.3	Unkn					1.3		
West Chastain	North Fork Bully Creek	1.1	Unkn					1.1		
Kitten Canyon	South Clover Creek	1.9	Unkn				0.1	1.7	0.1	
Kitten Canyon	South Clover Creek TR 2.6	0.6	Unkn					0.6		
Kitten Canyon	South Clover Creek TR 3.2	0.7	Unkn					0.7		
Kitten Canyon	South Clover Creek TR 3.4	0.4	Unkn					0.4		
Kitten Canyon	Steamboat Creek	3.5	Unkn						3.5	
Kitten Canyon	Steamboat Creek TR 2.3	1.4	Unkn						1.4	
Kitten Canyon	Steamboat Creek TR 3.4	0.6	Unkn					0.6		
Kitten Canyon	Steamboat Creek TR 3.7	0.6	Unkn						0.6	
Kitten Canyon	Godding Creek	1.5	Unkn						0.1	1.4
Kitten Canyon	Kitten Canyon	1.7	Unkn					1.7		
Kitten Canyon	McArthur Creek	1.7	Down							1.7
East Crow Creek	Rail Canyon	3.2	Down	REDB		2.5	0.7			
East Crow Creek	Rail Canyon TR 1.3	0.7	Unkn			0.7				
East Crow Creek	Rail Canyon TR 1.3 TR 0.2	0.3	Unkn			0.3				
East Crow Creek	Rail Canyon TR 2.3	0.3	Unkn					0.3		
East Crow Creek	Rail Canyon TR 2.4	0.2	Unkn					0.2		
East Crow Creek	Rail Canyon TR 2.5	0.3	Unkn					0.3		
East Crow Creek	South Clover Creek	1.2	Unkn			0.6	0.6			
East Crow Creek	South Clover Creek TR 0.9	0.9	Unkn			0.9				
East Crow Creek	Clover Creek	2.0	Down	REDB		0.6	1.4			
West Crow Creek	Clover Creek	0.7	Down	REDB				0.7		
West Crow Creek	Clover Creek TR 26.7	0.2	Unkn					0.2		
West Crow Creek	Clover Creek TR 27.1	0.4	Unkn					0.4		
West Crow Creek	Clover Creek TR 27.3	0.3	Unkn					0.3		
West Crow Creek	Clover Creek TR 27.41	1.8	Unkn				1.1	0.7		
West Crow Creek	Clover Creek TR 27.41 TR 0.4	0.2	Unkn					0.2		
West Crow Creek	Clover Creek TR 27.41 TR 0.7	0.9	Unkn					0.9		
West Crow Creek	Clover Creek TR 27.4 TR 0.7 TR 0.1	0.3	Unkn					0.3		
West Crow Creek	Clover Creek TR 27.42	1.6	Unkn					1.6		
West Crow Creek	South Clover Creek	0.9	Unkn				0.4	0.5		
West Crow Creek	South Clover Creek TR 3.6	0.5	Unkn					0.5		
West Crow Creek	South Clover Creek TR 3.9	0.6	Unkn					0.6		

West Crow Creek	Lost Creek	0.4	Unkn
Home FFR	Bully Creek	0.6	Unkn
Lost Creek FFR	Lost Creek	0.1	Unkn
Lost Creek FFR	McArthur Creek	0.2	Down
Lost Creek FFR	McArthur Creek TR 1.9	0.8	Unkn

[1] 1998 303(d) list.

Special management areas:

Beaver Dam WSA

BLM allotment name:	**DEARMOND-MURPHY**	**Allotment number:**	**10206**
Management category:	**M**	**BLM acres:**	**35,980**
AMP implemented:	**1986**	**Private acres:**	**10,470**
Season of use:	**04/01-10/31**	**State acres:**	**0**
Active AUM's:	**6,503**	**Other Federal acres:**	**122**
Suspended AUM's:	**0**		
Total AUM's:	**6,503**	**Total acres:**	**46,572**

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Mahogany Mountain	4,214	79	Middle Native	Static	A
Pole Gulch	3,600	97	Middle Native	Down	B
Castle Rock	10,578	93	Late Native	Static	B
Beulah Seeding	1,697	90	Fair Seeding	Unknown	A
Hunter Mountain	2,328	88	Late Native	Static	B
Hunter Creek	2,850	73	Late Native	Static	B
Morton	1,780	100	Middle Native	Static	A
Butler	2,012	100	Middle Native	Static	A
Murphy Reservoir	528	100	Middle Native	Unknown	A
West Bendire	482	94	Early Native	Unknown	A
East Bendire	855	98	Early Native	Static	A
West Munker	1,185	88	Late Native	Static	B
North Munker	2,035	100	Late Native	Static	B
South Munker	1,977	100	Late Native	Static	B
Lost Creek	2,037	15	Unknown	Unknown	
Warm Spring Creek	438	43	Unknown	Unknown	
Upper Warm Spring Creek	835	28	Unknown	Unknown	
Emmigrant Hill	1,178	19	Unknown	Unknown	
School Section	835	52	Unknown	Unknown	
Homestead	637	0	Unknown	Unknown	
Areas not identified in the annual grazing schedule					
FFR	2,477	49	Middle Native	Unknown	
FFR	830	25	Unknown	Unknown	
FFR	792	12	Unknown	Unknown	
FFR	391	38	Unknown	Unknown	

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	450	250	142.6
Pronghorn	25	0	2.1
Elk	30	50	56

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Mahogany Mountain	Warm Springs Creek	1.3	Static							
Castle Rock	Bendire Creek	1.5	Unkn							
Castle Rock	Hunter Creek TR 4.4	0.8	Unkn							
Castle Rock	Hunter Creek	1.7	Unkn							
Hunter Mountain	Bendire Creek	1.1	Unkn							
Hunter Mountain	Bendire Creek	0.1	Up							
Murphy Reservoir	Bendire Creek	0.7	Up							
Murphy Reservoir	Willow Basin Creek	0.7	Unkn							
West Bendire	Bendire Creek	1.4	Up							
East Bendire	Bendire Creek	0.6	Unkn							
South Munker	Warm Springs Creek	1.4	Static							
FFR	Bendire Creek	0.8	Unkn							
School Section	Willow Basin Creek	0.6	Unkn							

[1] 1998 303(d) list.

Special management areas:

Castle Rock Proposed ACEC (Alternatives A, C, D, D2, PRMP)
North Fork Malheur Administratively suitable National Wild and Scenic River (Alternatives B, C, D, D2, PRMP)
Castle Rock WSA
Working with Forest Service in Coordinated Resource Management Plan with similar goals and objectives

BLM allotment name:	**RING BUTTE**	**Allotment number:**	**10208**
Management category:	C	**BLM acres:**	394
AMP implemented:	No	**Private acres:**	2,799
Season of use:	Undefined	**State acres:**	0
Active AUM's:	32	**Other Federal acres:**	0
Suspended AUM's:	73		
Total AUM's:	105	**Total acres:**	3,193

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West Ring	1,316	0	Unknown	Unknown	J
East Ring	1,880	10	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	0	20.4
Pronghorn	10	0	.9
Elk	50	0	35

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

Special Management areas:

BLM allotment name:	**OREGON CANAL**	**Allotment number:**	**10209**
Management category:	C	**BLM acres:**	1,288
AMP implemented:	No	**Private acres:**	1,945
Season of use:	Undefined	**State acres:**	0
Active AUM's:	94	**Other Federal acres:**	166
Suspended AUM's:	0		
Total AUM's:	94	**Total acres:**	3,399

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Oregon	3,399	38	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	50	15.3
Pronghorn	0	5	0.4
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

Proper functioning condition assessment completed (miles)

[1] 1998 303(d) list.

BLM allotment name:	**CLOVER CREEK INDIVIDUAL**		**Allotment number:**	**10210**
Management category:	C	**BLM acres:**	3,459	
AMP implemented:	No	**Private acres:**	12,937	
Season of use:	Undefined	**State acres:**	0	
Active AUM's:	248	**Other Federal acres:**	0	
Suspended AUM's:	205			
Total AUM's:	453	**Total acres:**	16,396	

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Clover Creek	16,396	21	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	25	35.7
Pronghorn	15	0	1.3
Elk	30	30	42

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Clover Creek	Clover Creek	0.3	Unkn	REDB			0.3			
Clover Creek	Clover Creek TR 14.8	2.1	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**CASTLE ROCK**	**Allotment number:**	**10211**
Management category:	I	**BLM acres:**	19,820
AMP implemented:	1993	**Private acres:**	10,131
Season of use:	03/20-11/15	**State acres:**	0
Active AUM's:	4,816	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	4,816	**Total acres:**	29,951

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Castle Rock	4,131	95	Late Native	Static-Up	A
Clevenger Butte #1	1,515	99	Middle Native	Unknown	A
Clevenger Butte #2	2,284	76	Late Native	Static-Up	B
Duck Pond	1,691	86	Middle Native	Unknown	A
South Rockpile	3,820	29	Late Native	Unknown	B
North Rockpile	3,185	40	Middle Native	Static-Up	A
House	2,958	39	Early Native	Static-Up	A
Poison	1,431	97	Late Native	Unknown	B
Heifer	830	100	Middle Native	Static-Up	A
Hat Butte	3,126	68	Late Native	Static-Up	B
Sheep Rock	1,813	83	Middle Native	Static-Down	A
East Rockpile	918	69	Late Native	Unknown	B
Areas not identified in the annual grazing schedule					
FFR	3,534	34	Middle Native	Unknown	
Horse Flat Reservoir Exclosure	Unknown	100	Unknown	Unknown	
Hunter Spring	Unknown	100	Unknown	Unknown	

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	125	50	35.7
Pronghorn	10	0	0.9
Elk	100	0	70

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Clevenger Butte #1	Lost Creek	0.9	Unkn							
North Rockpile	North Fork Malheur River	1.2	Static	REDB BUTR	Yes	1.2				
Poison	Little Malheur River	0.1	Static	REDB	Yes					

[1] 1998 303(d) list.

Special management areas:

Castle Rock WSA
Beaver Dam WSA
Castle Rock Proposed ACEC (Alternatives A, C, D, D2, PRMP)
North Fork Malheur River Proposed (Alternatives A, C, D, D2, PRMP)
North Fork Malheur Administratively suitable National Wild and Scenic River (Alternatives B, C, D, D2, PRMP))

BLM allotment name:	**BUTTE TREE**	Allotment number:	**10212**
Management category:	C	BLM acres:	617
AMP implemented:	No	Private acres:	1,300
Season of use:	Undefined	State acres:	0
Active AUM's:	69	Other Federal acres:	0
Suspended AUM's:	54		
Total AUM's:	123	Total acres:	1,917

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Butte	1,917	32	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	10	9.2
Pronghorn	0	0	0
Elk	20	0	14

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**WEST CLOVER CREEK**	**Allotment number:**	**10213**
Management category:	C	**BLM acres:**	2,713
AMP implemented:	No	**Private acres:**	7,520
Season of use:	Undefined	**State acres:**	0
Active AUM's:	235	**Other Federal acres:**	0
Suspended AUM's:	200		
Total AUM's:	435 Total acres:	10,233	

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West Clover	10,233	27	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	25	35.7
Pronghorn	35	0	3
Elk	30	15	31.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Beaver Dam WSA

35 AUM is being transferred to Rick Wilcox (new allotment name and file is being developed)

BLM allotment name:	**RICHIE FLAT**	**Allotment number:**	**10214**
Management category:	I	**BLM acres:**	17,506
AMP implemented:	1994	**Private acres:**	2,233
Season of use:	04/01-11/15	**State acres:**	0
Active AUM's:	3,168	**Other Federal acres:**	0
Suspended AUM's:	381		
Total AUM's:	3,549	**Total acres:**	19,739

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
South Ridge	2,500	90	Early Native	Static-Up	E, F
North Ridge	3,793	100	Middle Native	Static-Up	A
Richie Flat Seeding	1,380	96	Fair Seeding	Static-Down	E, F
West Log Creek	5,532	90	Early Native	Static-Down	A
East Log Creek	4,375	99	Early Native	Static-Down	A, D
Poison Butte Seeding	780	100	Poor Seeding	Unknown	E
Areas not identified in the annual grazing schedule					
Richie Flat FFR	1,379	1	Early Native	Unknown	J

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
F) Maintain the integrity of enclosures constructed for wildlife benefits
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	40	125	33.6
Pronghorn	15	25	3.4
Elk	5	15	14

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
North Ridge	Clover Creek	0.8	Unkn				0.8			
North Ridge	Clover Creek TR 14.8	1.2	Unkn							
West Log Creek	Birch Creek TR 1.2	0.9	Unkn					0.9		
West Log Creek	Birch Creek	2.0	Unkn					0.5	1.5	
West Log Creek	Deep Creek	0.3	Unkn							
West Log Creek	Deep Creek TR 2.1	0.1	Unkn							
West Log Creek	Log Creek	4.2	Unkn						4.2	

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East Log Creek	Reds Creek	5.7	Up		0.6	2.9	2.2

[1] 1998 303(d) list.

Special management areas:

South Ridge Bully Creek Proposed ACEC (Alternatives A, C, D, D2, PRMP)

North Ridge Bully Creek Proposed ACEC (Alternatives A, C, D, D2, PRMP)

Class of livestock has changed from cattle to sheep

BLM allotment name:	**BRIAN CREEK**	Allotment number:	**10215**
Management category:	M	BLM acres:	4,816
AMP implemented:	1995	Private acres:	90
Season of use:	04/01-11/15	State acres:	0
Active AUM's:	1,090	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	1,090	Total acres:	4,907

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Mountain	2,832	98	Late Native	Unknown	B
North NG Seeding	1,171	98	Fair Seeding	Unknown	A
South NG Seeding	904	98	Fair Seeding	Static-Up	A

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	15	10.2
Pronghorn	15	10	2.1
Elk	5	15	14

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Mountain	Brady Creek	1.1	Unkn				1.1			
Mountain	Brady Creek TR 0.3	1.1	Unkn				1.1			
Mountain	Brian Creek	1.8	Static				0.2		1.6	
Mountain	Buckbrush Creek	2.1	Static					2.1		
Mountain	Buckbrush Creek TR 5.1	0.1	Unkn					0.1		
Mountain	Buckbrush Creek TR 5.5	0.6	Unkn					0.6		
Mountain	Reds Creek	0.8	Static				0.8			
North NG Seeding	Solders Canyon	1.0	Unkn					1.0		
South NG Seeding	Solders Canyon	0.2	Unkn				0.2			

[1] 1998 303(d) list.

BLM allotment name:	**WHITLEY CANYON**	Allotment number:	**10216**
Management category:	M	BLM acres:	14,511
AMP implemented:	1988	Private acres:	3,409
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	2,376	Other Federal acres:	143
Suspended AUM's:	0		
Total AUM's:	2,376	Total acres:	18,063

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Burnt Mountain	4,589	99	Middle Native	Down	A, E
Pete Mountain	4,369	95	Early Native	Down	A, E
Pete Mountain	1,306	duplicate	Early Native	Down	A, E
West Juniper	3,259	95	Middle Native	Static	A, E
Little Malheur	5,003	56	Middle Native	Static	B, E, J
Areas not identified in the annual grazing schedule					
PJ#1 FFR	621	2	Unknown	Unknown	J

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	150	50.9
Pronghorn	5	0	0.4
Elk	45	25	49

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Little Malheur	N Fork Malheur River	1.0	Static	BUTR REDB		0.4		0.2	0.4	

[1] 1998 303(d) list.

Special management areas:

North Fork Malheur River Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Little Malheur Pasture mostly private along river; however, managing pasture under riparian objectives

BLM allotment name:	**BEULAH RESERVOIR**	**Allotment number:**	**10217**
Management category:	I	**BLM acres:**	11,983
AMP implemented:	1991	**Private acres:**	6,581
Season of use:	03/15-10/31	**State acres:**	0
Active AUM's:	2,560	**Other Federal acres:**	9
Suspended AUM's:	0		
Total AUM's:	2,560	**Total acres:**	18,753

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Antelope	3,743	41	Middle Native	Static	B
Lower Poverty	717	98	Middle Native	Static	A
Upper Poverty	1,138	95	Middle Native	Static	A
Moonshine	1,049	95	Early Native	Static	A, E
Jack Creek	2,025	100	Middle Native	Unknown	A, E
Big Seeding	541	41	Fair Seeding	Down	B
Burnt Field	309	100	Middle Native	Unknown	A, E
Scab	1,358	72	Middle Native	Down	A
Little Seeding	151	62	Fair Seeding	Unknown	A
West M J Field	1,697	53	Middle Native	Unknown	D
River Field	773	61	Late Native	Unknown	D
Bennet	386	100	Unknown	Unknown	J
Poverty Flat	869	10	Unknown	Unknown	J
Mud Spring	317	99	Unknown	Unknown	J
Horse	221	4	Unknown	Unknown	J
Upper Creek	639	13	Unknown	Unknown	J
Creek	1,126	24	Unknown	Unknown	J
East M J Field	392	64	Unknown	Unknown	J
North Homestead	2,092	62	Unknown	Unknown	J

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	275	350	127.4
Pronghorn	25	0	2.1
Elk	85	100	129.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
River Field	North Fork Malheur River	1.2	Static	BUTR REDB	Yes		1.2			
East MJ Field	North Fork Malheur River	1.0	Static		Yes		1.0			

[1] 1998 303(d) list.

Special management areas:

Redband trout, Bull trout Special Status fish

Ott Mountain Proposed ACEC (Alternatives A, C, D, D2)

North Fork Malheur Administratively suitable National Wild and Scenic River (Alternatives B, C, D, D2, PRMP)

North Fork Malheur River Proposed ACEC (Alternatives A, C, D, D2, PRMP)

BLM allotment name:	**BUCKBRUSH**	Allotment number:	**10218**
Management category:	I	BLM acres:	20,072
AMP implemented:	1995	Private acres:	960
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	2,797	Other Federal acres:	0
Suspended AUM's:	462		
Total AUM's:	2,259	Total acres:	21,032

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Buckbrush Seeding	2,797	100	Fair Seeding	Static-Down	
Buckbrush	7,031	98	Middle Native	Static-Up	
Turnout	2,839	100	Middle Native	Static	
Mountain	5,147	99	Late Native	Static-Up	B
Salters	395	23	Unknown	Static	
Gathering	557	84	Early Native	Static	A
State Pasture	2,266	82	Unknown	Unknown	

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

C) Maintain the integrity of research and study plots

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	75	45.8
Pronghorn	10	15	2.1
Elk	5	20	17.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF	
Buckbrush Seeding	Buckbrush Creek	1.7	Up				0.9				0.8
Buckbrush Seeding	Pancake Creek	0.9	Unkn								0.9
Buckbrush	Buckbrush Creek	3.5	Static				0.7	2.8			
Buckbrush	Buckbrush Creek TR 5.1	1.1	Unkn					1.1			
Buckbrush	Buckbrush Creek TR 5.5	0.7	Unkn					0.7			
Buckbrush	Dry Creek	2.7	Unkn				2.7				
Turnout	Solders Canyon	2.1	Unkn				0.8	1.3			
Turnout	Solders Canyon TR 3.9	0.5	Unkn					0.5			
Turnout	East Prong Dry Creek	3.5	Down				1.3	2.2			
Mountain	Dry Creek	4.9	Unkn				2.0		2.9		
Mountain	Dry Creek TR 12.9	1.9	Unkn				1.9				
Mountain	Buckbrush Creek	0.6	Static					0.6			
Mountain	Buckbrush Creek TR 5.1	1.1	Unkn					1.1			
Mountain	East Prong Dry Creek	0.1	Down								
State	Solders Canyon	2.2	Unkn					2.2			
State	Solders Canyon TR 3.9	0.3	Unkn					0.3			

[1] 1998 303(d) list.

Special management areas:

Develop wildlife objective

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BLM allotment name:	**MALHEUR RIVER**	Allotment number:	**10219**
Management category:	C	BLM acres:	819
AMP implemented:	No	Private acres:	2,464
Season of use:	Undefined	State acres:	0
Active AUM's:	53	Other Federal acres:	0
Suspended AUM's:	117		
Total AUM's:	170	Total acres:	3,283

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Malheur Riparian	2,260	7	Unknown	Unknown	
Areas not identified in the annual grazing schedule					
L M Riparian Stream Exclosure	1,026	65	Unknown	Unknown	

[1] Current allotment management objectives:

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	15	9.2
Pronghorn	0	0	0
Elk	5	0	3.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)					
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF	LM
Riparian STEX	Little Malheur River	1.0	Static	REDB	Yes						

[1] 1998 303(d) list.

Special management areas:

BLM allotment name:	**WILLOW BASIN**	Allotment number:	**10222**
Management category:	I	BLM acres:	43,455
AMP implemented:	1995	Private acres:	6,540
Season of use:	04/01-11/30	State acres:	0
Active AUM's:	7,006	Other Federal acres:	0
Suspended AUM's:	1,117		
Total AUM's:	8,123	Total acres:	49,995

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Juniper Spring	7,229	93	Middle Native	Down	A
North Cottonwood Seeding	1,560	89	Poor Seeding	Down	D
Indian Creek	5,424	98	Middle Native	Static-Down	A
Pan Handle	3,406	88	Early Native	Static-Down	A
North Fork	1,460	79	Middle Native	Down	D
State Block	2,590	100	Middle Native	Unknown	A
Willow Basin Creek	9,091	99	Middle Native	Down	D
Bully Creek	11,041	91	Middle Native	Down	
Areas not identified in the annual grazing schedule					
FFR	5,538	50	Early Native	Unknown	
Shroyer FFR	569	70	Unknown	Unknown	
FFR	2,087	53	Unknown	Unknown	

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	400	100	101.9
Pronghorn	5	25	2.6
Elk	5	15	14

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Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Juniper Springs	North Fork Indian Creek	3.7	Unkn					3.1		
Juniper Springs	North Fork Indian Creek TR 8.5	2.0	Unkn					2.0		
North Cottonwood Seeding	Indian Creek	0.9	Down			0.5	0.4			
Indian Creek	North Fork Indian Creek	3.0	Unkn				3.0			
Indian Creek	South Fork Indian Creek TR 5.1	1.3	Unkn							
Pan Handle	Indian Creek	0.2	Unkn				0.2			
Pan Handle	North Fork Indian Creek	0.8	Unkn					0.8		
North Fork	North Fork Bully Creek	0.8	Down				0.3	0.2		
State Block	North Fork Bully Creek	0.3	Unkn					0.3		
State Block	North Fork Bully Creek, TR 5.4	1.7	Unkn					1.7		
Willow Basin Creek	Willow Basin Creek TR 2.9	0.9	Unkn							
Willow Basin Creek	Willow Basin Creek	0.1	Unkn							
Willow Basin Creek	Bendire Creek	1.6	Unkn							
Willow Basin Creek	Bendire Creek	0.1	Up							
Willow Basin Creek	Willow Basin Creek TR 2.5	0.6	Unkn							
Willow Basin Creek	Willow Basin Creek	2.4	Unkn							
Willow Basin Creek	Willow Basin Creek TR 2.7	0.6	Unkn							
Bully Creek	Beaver Dam Creek	2.1	Unkn					1.3	0.8	
Bully Creek	Bendire Creek	0.8	Unkn							
Bully Creek	Godding Creek	1.8	Unkn	REDB					1.5	
Bully Creek	McArthur Creek	1.4	Down				1.4			
Bully Creek	North Bully Creek	2.6	Down				0.8	0.7	1.1	
Bully Creek	Puckett Creek	1.7	Down				0.9		0.8	
Bully Creek	Puckett Creek TR 1.0	0.6	Down						0.6	
Bully Creek	South Bully Creek	4.6	Down	REDB		4.6				
Bully Creek	South Bully Creek TR 4.5	0.1	Down							
Bully Creek	Whiskey Gulch	1.4	Unkn			1.4				

[1] 1998 303(d) list.

Special management areas:

Castle Rock Proposed ACEC (Alternatives A, C, D, D2, PRMP)

Beaver Dam WSA

BLM allotment name:	**LAVA RIDGE**	**Allotment number:**	**10223**
Management category:	I	BLM acres:	11,069
AMP implemented:	1991	Private acres:	1,222
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	1,722	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	1,722	Total acres:	12,291

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Hay Canyon	3,155	87	Late Native	Unknown	B
East Lava Seeding	2,240	84	Fair Seeding	Static	I
West Lava Seeding	1,879	90	Poor Seeding	Static	I
North Bully	3,001	100	Early Native	Static	B
South Bully	2,016	87	Early Native	Unknown	A, D

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
I) Maximize availability of fall green-up for winter deer/antelope use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	50	30.6
Pronghorn	5	25	2.6
Elk	10	25	24.5

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Hay Canyon	Clover Creek	0.1	Unkn				0.1			
Hay Canyon	Clover Creek TR 13.3	0.6	Unkn					0.6		
Hay Canyon	Deep Creek	0.4	Unkn							
Hay Canyon	Deep Creek TR 2.1	0.2	Unkn							
Hay Canyon	Hay Canyon	1.9	Unkn					1.9		
East Lava Seeding	Bully Creek	0.2	Unkn							
South Bully	North Fork Bully Creek	2.1	Up				0.8	1.3		

[1] 1998 303(d) list.

Special management areas:
South Ridge Bully Creek Proposed ACEC (Alternatives A, C, D, D2, PRMP)
North Ridge Bully Creek Proposed ACEC (Alternatives A, C, D, D2, PRMP)

BLM allotment name:	**BULLY RESERVOIR**	Allotment number:	**10224**
Management category:	C	BLM acres:	640
AMP implemented:	No	Private acres:	1,922
Season of use:	Undefined	State acres:	0
Active AUM's:	74	Other Federal acres:	80
Suspended AUM's:	0		
Total AUM's:	74	Total acres:	2,642

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bully Reservoir	2,642	24	Unknown	Unknown	A

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

Management consideration with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	25	11
Pronghorn	5	5	0.9
Elk	15	5	14

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF

[1] 1998 303(d) list.

Special management areas:

Allotment not delineated in GIS (acreage is estimated)

BLM allotment name:	**RED HILLS**	Allotment number:	**10302**
Management category:	I	BLM acres:	51,477
AMP implemented:	None	Private acres:	4,390
Season of use:	04/01-10/31	State acres:	5,348
Active AUM's:	3,982	Other Federal acres:	0
Suspended AUM's:	918		
Total AUM's:	4,900	Total acres:	61,215

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Squaw Creek Seeding	5,505	97	Poor Seeding	Down	A
Lake Ridge	22,565	96	Late Native	Static	D
Red Butte	9,841	96	Middle Native	Static	A
Cherry Creek	14,928	99	Middle Native	Static	A
Areas not identified in the annual grazing schedule					
Coleman FFR	1,088	9	Unknown	Unknown	J
Coyote Well State Block	7,275	1	Unknown	Unknown	J
Tims Peak Reservoir Enclosure	14	100	Unknown	Unknown	K

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

J) Pasture dominated by private land and managed custodial with no specified management objective

K) Grazed reservoir enclosure with no management objective identified

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	350	500	173.2
Pronghorn	100	50	12.9
Elk	50	50	70

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Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Lake Ridge	Camp Creek	5.1	Unkn	REDB						
Lake Ridge	Cottonwood Creek	6.3	Up	REDB						
Lake Ridge	Long Creek	2.8	Unkn							
Lake Ridge	Tims Creek	1.2	Unkn							
Lake Ridge	Wildcat Creek	0.1	Unkn							

[1] 1998 303(d) list.

Special management areas:

Lake Ridge Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Cottonwood Creek Administratively suitable National Wild and Scenic River (Alternative D)
Camp Creek Group WSA's
Sage grouse habitat
Golden buckwheat Special Status plant

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BLM allotment name:	**KEENEY CREEK**	Allotment number:	**10401**
Management category:	I	BLM acres:	59,439
AMP implemented:	None	Private acres:	4,337
Season of use:	04/01-10/31	State acres:	4,632
Active AUM's:	7,119	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	7,119	Total acres:	68,407

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Callahan	11,020	100	Late Native	Static-Down	E
Little Valley Seeding	2,536	100	Fair Seeding	Static-Down	A
North Winter Springs Seeding	1,005	100	Fair Seeding	Static-Down	I
South Winter Springs Seeding	1,093	97	Fair Seeding	Static-Down	I
Hunter	11,780	98	Middle Native	Static	B
East Hunter	3,755	99	Late Native	Static	A
Freezeout	6,334	99	Late Native	Static	E
Drip Springs	4,209	93	Middle Native	Up	A
Chukar	1,650	100	Middle Native	Static	A
Keeney Creek Riparian	4,374	96	Late Native	Up	A,D
Quicksand	10,046	99	Late Native	Static	E
Areas not identified in the annual grazing schedule					
Winters Place FFR	6,707	29	Middle Native	Unknown	J
Stacey Cabin Exclosure	40	100	Unknown	Unknown	L
Callahan Stream Exclosure	4	100	Unknown	Unknown	L
Riley Place State Block	3,855	13	Unknown	Unknown	J
Drip Spring Water Gap	Unknown	Unknown	Unknown	Unknown	A,D

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
I) Maximize availability of fall green-up for winter deer/antelope use
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	50	30.6
Pronghorn	100	100	17.1
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Callahan	Malheur River TR 41.9	3.2	Unkn							
Callahan	Malheur River TR 41.0	0.1	Up							
Little Valley Seeding	Malheur River TR 41.9	0.2	Unkn							
Winter Spring Seeding	Basin Creek	0.8	Unkn							
Chukar	Basin Creek	2.8	Unkn							
Keeney Creek Riparian/ Drip Spring Water Gap	Keeney Creek	6.0	Unkn							
Winters Place FFR	Cottonwood Creek	0.3	Unkn	REDB						
Winters Place FFR	Cottonwood Creek	0.6	Up	REDB						
Winters Place FFR	Keeney Creek	0.1	Unkn							
Stacey Cabin Exclosure	Malheur River TR 41.9	0.3	Up							
Callahan STEX	Basin Creek	0.1	Unkn							
Callahan STEX	Basin Creek	0.1	Up							
Riley Place State Block	Keeney Creek	0.1	Unkn							
Quicksand Pasture	Keeney Creek	0.4	Unkn							

[1] 1998 303(d) list.

Special management areas:

Biddle's lupine Special Status plant

BLM allotment name:	**NYSSA**	Allotment number:	**10403**
Management category:	I	BLM acres:	67,865
AMP implemented:	1999	Private acres:	778
Season of use:	04/01-10/31+	State acres:	0
Active AUM's:	5,882	Other Federal acres:	8,310
Suspended AUM's:	0		
Total AUM's:	5,882	Total acres:	76,955

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North Mud Spring	5,322	95	Late Native	Static-Down	B
South Mud Spring	3,067	100	Late Native	Static	B
North Rock Creek	8,152	100	Middle Native	Static	A, D
Sagebrush	12,175	100	Middle Native	Static	A
Ryefield Seeding	3,752	100	Good Seeding	Static-Down	B
Grassy Seeding	2,971	100	Good Seeding	Up	B
Grassy Mountain	30,369	83	Late Native	Static-Up	B
South Rock Creek	7,318	100	Middle Native	Static	A, D
Areas not identified in the annual grazing schedule					
FFR	1,174	84	Unknown	Unknown	J
Ryefield Reservoir Exclosure	4	100	Unknown	Unknown	L
Rock Creek Riparian Stream Exclosure (Owyhee River)	2,644	61	Unknown	Unknown	A, D, L
Sagebrush Reservoir Exclosure	2	100	Unknown	Unknown	L
North Grassy Mountain Reservoir Enclosure	12	100	Unknown	Unknown	K
Sagebrush Spring Enclosure	2	100	Unknown	Unknown	K
Mud Spring Exclosure	Unknown	100	Unknown	Unknown	L
Mud Spring Reservoir Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed reservoir/spring enclosure with no management objective identified
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	20	50	14.3
Pronghorn	15	15	2.6
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
North Rock Creek	Rock Spring Canyon	0.8	Static							
Grassy Mountain	Owyhee River	0.1	Up		Yes					
Rock Creek Riparian	Owyhee River	4.4	Up		Yes					
Rock Creek Riparian	Owyhee River	7.3	Up		Yes					

[1] 1998 303(d) list.

Special management areas:

Sage grouse habitat

Biddle's lupine, Mulford's milkvetch, solitary milkvetch, Malheur forget-me-not, Cusick's chaenactis Special Status plants

Owyhee Below the Dam Proposed ACEC (Alternatives A, C, D, D2, PRMP)

Dry Creek Gorge Proposed ACEC (Alternatives C, D, D2, PRMP)

Owyhee Views Proposed ACEC (Alternatives C, D, D2, PRMP)

Owyhee River Administratively suitable National Wild and Scenic Rivers (Alternatives A, B, C, D)

BLM allotment name:	**FREEZEOUT**	Allotment number:	**10404**
Management category:	M	BLM acres:	129,984
AMP implemented:	1989	Private acres:	12,193
Season of use:	04/01-10/31 +	State acres:	2,701
Active AUM's:	11,590	Other Federal acres:	147
Suspended AUM's:	0		
Total AUM's:	11,590	Total acres:	145,024

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Double Mountain	12,665	98	Middle Native	Down	A
Sand Hollow Seeding	3,285	98	Good Seeding	Static	E
Canyon	21,528	99	Middle Native	Static	A
North Kane Spring	10,651	98	Middle Native	Up	A
South Kane Spring	8,114	100	Middle Native	Up	A
Freezeout Lake	21,537	100	Late Native	Static	B
South Freezeout	12,771	99	Late Native	Static	B
Hurley Spring	33,654	98	Late Native	Static	B
Cow Hollow Seeding	1,549	100	Good Seeding	Static	B
West Sand Hollow Seeding	905	100	Good Seeding	Static	B
Double Mountain Seeding	891	100	Late Native	Static	B
Areas not identified in the annual grazing schedule					
Twin Spring Exclosure	18	100	Unknown	Unknown	L
Kane Spring Reservoir Exclosure	66	100	Unknown	Unknown	L
Russell FFR	5,443	18	Unknown	Unknown	J
Bishop FFR	6,533	23	Unknown	Unknown	J
Twin Spring Reservoir Enclosure	13	100	Unknown	Unknown	K
Rye Field FFR	2,345	51	Unknown	Unknown	J
Hoo Doo State FFR	3,055	9	Unknown	Unknown	J
Freezeout Creek FFR	2,139	23	Late Native	Static	J
Double Mountain Botanical Exclosure	Unknown	100	Unknown	Unknown	L
Upper Flowing Well Exclosure	Unknown	100	Unknown	Unknown	L
Lower Flowing Well Exclosure	Unknown	100	Unknown	Unknown	L
DM Spring and Reservoir Exclosure	Unknown	100	Unknown	Unknown	L
Little DM Spring Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed reservoir enclosure with no management objective identified
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	50	61.1
Pronghorn	100	100	17.1
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Sand Hollow Seeding	Negro Rock Canyon	0.4	Unkn							
Canyon	Negro Rock Canyon	7.7	Unkn							
South Freezeout	Twin Springs Creek TR 5.2	0.9	Unkn							
Hurley Spring	Dry Creek	12.7	Unkn	REDB						
West Sand Hollow Seeding	Negro Rock Canyon	1.3	Unkn							
Bishop FFR	Negro Rock Canyon	0.3	Unkn							

[1] 1998 303(d) list.

Special management areas:

Dry Creek Gorge Proposed ACEC (Alternatives C, D, D2, PRMP)

Dry Creek Administratively suitable National Wild and Scenic Rivers (Alternatives C, D, D2, PRMP)

Dry Creek WSA

Sage grouse

Biddle's lupine, Malheur forget-me-not, Mulford's milkvetch Special Status plants

BLM allotment name:	**QUARTZ MOUNTAIN**	Allotment number:	**10406**
Management category:	M	BLM acres:	92,886
AMP implemented:	None	Private acres:	6,730
Season of use:	3/1 - 2/28	State acres:	485
Active AUM's:	7,472	Other Federal acres:	9,093
Suspended AUM's:	0		
Total AUM's:	7,472	Total acres:	109,195

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Cedar Mountain	21,848	98	Late Native	Static	B
Willow Spring	16,255	72	Late Native	Static	D
Red Butte	48,102	88	Late Native	Static	B
Hole-in-the-Ground	7,681	94	Late Native	Static	D
South McNulty	11,185	100	Middle Native	Static-Down	E
Areas not identified in the annual grazing schedule					
Mud Flat FFR	4,067	1	Unknown	Unknown	J
Mud Flat State FFR	14,953	17	Late Native	Static	J
Greeley Bar Exclosure	55	100	Late Native	Static	O

[1] Current allotment management objectives:

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

J) Pasture dominated by private land and managed custodial with no specified management objective

O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction Civil No. 98-97-RE

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	400	400	163.0
Pronghorn	50	50	8.6
Elk	25	25	35

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Willow Spring	Owyhee River	3.7	Up	REDB	Yes	0.9				
Hole-In-The-Ground	Owyhee River	3.2	Up	REDB	Yes	2.0	1.2			
Greeley Bar	Owyhee River	0.5	Up	REDB	Yes	0.5				

Proper functioning condition assessment completed (miles): PFC, FARU, FARN, FARD, NF.

[1] 1998 303(d) list.

Special management areas:

Owyhee Views Proposed ACEC (Alternatives C, D, D2, PRMP)
Owyhee River Existing ACEC (Alternative B)
Owyhee National Wild and Scenic River
Dry Creek Buttes WSA
Cedar Mountain WSA
Owyhee Breaks WSA
Lower Owyhee WSA
Sterile milkvetch, Cusick's chaenactis Special Status plants

BLM allotment name:	**LITTLE VALLEY**	Allotment number:	**10407**
Management category:	M	BLM acres:	14,392
AMP implemented:	1988	Private acres:	1,557
Season of use:	04/01-12/31	State acres:	0
Active AUM's:	1,373	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	1,373	Total acres:	15,949

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North Vine Hill	1,084	100	Late Native	Up	B
East Vine Hill	2,500	100	Early Native	Up	A
South Vine Hill	1,983	100	Early Native	Static-Up	B
Rabbit Farm	5,705	93	Late Native	Up	B
Little Valley Native	4,387	74	Middle Native	Static	A
Areas not identified in the annual grazing schedule					
Vines Hill Reservoir Exclosure	18	100	Unknown	Unknown	L
FFR	271	100	Unknown	Unknown	J

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	60	22.4
Pronghorn	25	50	6.4
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
Little Valley Brush Control	Malheur River TR 41.9	0.8	Unkn							

[1] 1998 303(d) list.

Special management areas:

Malheur forget-me-not, Biddle's lupine, Mulford's milkvetch Special Status plants

BLM allotment name:	**MITCHELL BUTTE**	Allotment number:	**10408**
Management category:	C	BLM acres:	2,778
AMP implemented:	None	Private acres:	158
Season of use:	05/01-08/31	State acres:	0
Active AUM's:	152	Other Federal acres:	388
Suspended AUM's:	0		
Total AUM's:	152	Total acres:	3,324

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Mitchell Butte	3,324	89	Middle Native	Unknown	J

[1] Current allotment management objectives:
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	15	25	8.2
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

					Water quality	Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:
Owyhee Below the Dam Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Owyhee River administratively suitable National Wild and Scenic River (Alternatives A, C, D)

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BLM allotment name:	**VALE BUTTE NORTH**	Allotment number:	**10409**
Management category:	C	BLM acres:	252
AMP implemented:	None	Private acres:	254
Season of use:	04/01-04/30	State acres:	0
Active AUM's:	10	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	10	Total acres:	507

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North	507	50	Unknown	Unknown	J

[1] Current allotment management objectives:

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	15	25	8.2
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**RADAR HILL**	**Allotment number:**	**10410**
Management category:	M	BLM acres:	4,554
AMP implemented:	1995	Private acres:	982
Season of use:	03/01-05/31; 10/01-12/31	State acres:	0
Active AUM's:	686	Other Federal acres:	30
Suspended AUM's:	0		
Total AUM's:	686	Total acres:	5,566

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North Radar Hill	3,367	71	Early Native	Unknown	A
South Radar Hill Seeding	2,159	99	Good Seeding	Down	B

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	125	35.7
Pronghorn	10	25	3
Elk	2	5	4.9

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Malheur forget-me-not Special Status plant

BLM allotment name:	**BLACKJACK**	Allotment number:	**10501**
Management category:	M	BLM acres:	13,613
AMP implemented:	1989	Private acres:	1,841
Season of use:	04/15-10/15	State acres:	0
Active AUM's:	1,050	Other Federal acres:	4,028
Suspended AUM's:	0		
Total AUM's:	1,050	Total acres:	19,482

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East	9,934	85	Middle Native	Up	B, E
West	9,072	61	Middle Native	Static	B, E
Areas not identified in the annual grazing schedule					
Brown Butte Wildlife Upland Exclosure	476	48	Early Native	Unknown	L

[1] Current allotment management objectives:

B) Maintain the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

L) Maintain/improve resource conditions or protect facilities through livestock exclusion

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	75	25.5
Pronghorn	75	100	15
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee Below the Dam Proposed ACEC (Alternatives A, C, D, D2, PRMP)

Owyhee River Administratively suitable National Wild and Scenic Rivers (Alternatives A, C, D)

Mulford's milkvetch and Malheur forget-me-not Special Status plants

BLM allotment name:	**LOWER OWYHEE**	**Allotment number:**	**10502**
Management category:	M	**BLM acres:**	1,211
AMP implemented:	None	**Private acres:**	<1
Season of use:	03/01-11/30	**State acres:**	0
Active AUM's:	244	**Other Federal acres:**	524
Suspended AUM's:	0		
Total AUM's:	244	**Total acres:**	1,735

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Lower Owyhee	1,735	85	Middle Native	Unknown	B

[1] Current allotment management objectives:

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	45	65	22.4
Pronghorn	5	10	1.3
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee Below the Dam Proposed ACEC (Alternatives A, C, D, PRMP)

Owyhee River Administratively suitable National Wild and Scenic Rivers (Alternatives A, C, D)

BLM allotment name:	**THREE FINGERS**	Allotment number:	**10503**
Management category:	I	BLM acres:	135,361
AMP implemented:	No	Private acres:	23,118
Season of use:	03/01-02/28	State acres:	2,534
Active AUM's:	9,981	Other Federal acres:	8,237
Suspended AUM's:	4,653		
Total AUM's:	14,634	Total acres:	169,249

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Sheephead Seeding	8,467	98	Unknown	Static	B
Camp Kettle North	7,804	93	Late Native	Unknown	D
Camp Kettle South	6,139	76	Late Native	Unknown	D
Devils Gate	4,098	9	Late Native	Static-up	B
McIntyre	7,656	99	Middle Native	Up	A
Saddle Butte	9,438	99	Middle Native	Static-up	A
Bannock	12,825	100	Late Native	Up	A
Sulpher Spring Seeding	1,895	97	Unknown	Static-up	B
Riverside	54,524	89	Middle Native	Static-up	A
Blackrocks	15,016	70	Middle Native	Static-up	D
Areas not identified in the annual grazing schedule					
Leslie Gulch	13,539	95	Late	Up	B, L
FFR	27,849	28	Unknown	Unknown	J
Succor Creek Botanical Exclosure	Unknown	100	Unknown	Unknown	L
Saddle Butte Reservoir	Unknown	100	Unknown	Unknown	L
Three Fingers Reservoir	Unknown	100	Unknown	Unknown	L
Antelope Test Plot	Unknown	100	Unknown	Unknown	C

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and test plots
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	750	1000	356.6
Pronghorn	25	15	3.4
Elk	20	20	28

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Camp Kettle North	Succor Creek	0.5	Up							
Camp Kettle South	Succor Creek	2.4	Up							
Saddle Butte	Succor Creek	0.8	Up							
Bannock	Carter Creek	0.3	Unkn							
FFR	Dog Creek	0.2	Unkn							
FFR	Mahogany Creek	0.3	Unkn							
FFR	Spring Creek	2.0	Unkn							
FFR	Succor Creek	0.1	Unkn							
Leslie Gulch	Spring Creek	0.4	Unkn							
Blackrocks	Owyhee River	2.3	Up		Yes					

[1] 1998 303(d) list.

Special management areas:

Owyhee National Wild and Scenic River
Three Fingers Wild Horse Management Area (HMA)
Blue Canyon WSA
Slocum Creek WSA
Upper Leslie Gulch WSA
Honeycombs WSA
Leslie Gulch ACEC
Honeycombs ACEC
Owyhee clover, sterile milkvetch, grimy ivesia Special status plants

BLM allotment name:	**SPRING MOUNTAIN**	Allotment number:	**10504**
Management category:	I	BLM acres:	43,222
AMP implemented:	No	Private acres:	3,179
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	6,473	Other Federal acres:	0
Suspended AUM's:	2,887		
Total AUM's:	9,360	Total acres:	46,402

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Spring Creek Seeding North	1,374	88	Excellent Seeding	Static	B
Spring Creek Seeding South	2,700	97	Excellent Seeding	Static-Down	B
Falen Seeding	551	97	Unknown	Static-Up	E
Spring Basin Seeding North	1,404	88	Unknown	Static	E
Carter Creek Seeding	2,733	99	Unknown	Static	B
Shalerock	5,257	98	Late Native	Static-Up	A
Old Maid Seeding North	915	100	Unknown	Static	E
Sagehen Basin	2,228	99	Middle Native	Static-Up	A
Spring Basin Seeding South	2,092	100	Unknown	Static	E
Spring Mountain Seeding	2,067	94	Unknown	Static	B
Spring Mountain Native Range	19,563	97	Middle Native	Static-Up	A
Sheaville	932	94	Middle Native	Static-Up	A
Old Maid seeding South	1,621	100	Unknown	Static	E
Sticky Joe Seeding	959	99	Unknown	Static	E
Areas not identified in the annual grazing schedule					
FFR	2,005	13	Unknown	Unknown	J
Dog Creek Pit Exclosure	Unknown	100	Unknown	Unknown	L
Carter Wildlife Exclosure	Unknown	100	Unknown	Unknown	L
Mahogany Test Plot	Unknown	100	Unknown	Unknown	C

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	300	75	76.4
Pronghorn	75	25	8.6
Elk	40	40	56

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Spring Creek Seeding	Spring Creek	1.3	Unkn							
Carter Creek Seeding	Carter Creek	0.4	Unkn							
Carter Creeek Seeding	Spring Creek	1.8	Unkn							
Carter Creek Seeding	Spring Creek TR 5.1	0.8	Unkn							
Carter Creek Seeding	Spring Creek TR 6.3	1.1	Unkn							
Shalerock	South Fork Carter Creek TR 3.8	0.1	Up							
Shalerock	South Fork Carter Creek	1.7	Up	REDB						
Shalerock	Spring Creek	2.4	Unkn							
Shalerock	Spring Creek TR 6.3	1.1	Unkn							
Old Maid Seeding North	Old Maids Creek	0.1	Unkn							
Sagehen Basin	Mahogany Creek	0.5	Unkn							
Spring Basin Seeding	Dog creek	0.7	Unkn							
Spring Mountain Seeding	Dog Creek	1.0	Unkn							
Spring Mountain Seeding	Hog Creek	1.3	Unkn							
Spring Mountain Seeding	Whiskey Creek	0.1	Unkn							
Spring Mountain Seeding	Whiskey Creek TR 0.5	1.5	Unkn							
Spring Mountain Native Range	Dog Creek TR 2.9	0.6	Unkn							
Spring Mountain Native Range	Dog Creek	1.4	Unkn							
Spring Mountain Native Range	Old Maids Creek	2.0	Unkn							
Spring Mountain Native Range	Old Maids Creek TR 4.6	1.0	Unkn							
Spring Mountain Native Range	Thomas Creek	1.4	Unkn							
Spring Mountain Native Range	Whiskey Creek TR 0.5	1.1	Unkn							
Spring Mountain Native Range	Wilson Creek TR 1.5	1.1	Unkn							
Spring Mountain Native Range	Wilson Creek	2.7	Unkn							
Old Maid Seeding South	Old Maids Creek	0.5	Unkn							
FFR	Wilson Creek TR 1.5	0.1	Unkn							

[1] 1998 303(d) list.

Special management areas:

Spring Mountain Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Sage grouse
Owyhee clover, sterile milkvetch, smooth blazingstar Special Status plants

BLM allotment name:	**MCCAIN SPRINGS**	Allotment number:	**10505**
Management category:	I	BLM acres:	9,587
AMP implemented:	No	Private acres:	0
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	1,949	Other Federal acres:	0
Suspended AUM's:	953		
Total AUM's:	2,902	Total acres:	9,587

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East Blue Canyon	2,425	100	Late Native	Static	B
McCain Spring Seeding	3,971	100	Unknown	Static-Up	E
Road Reservoir	3,190	100	Middle Native	Up	B
Areas not identified in the annual grazing schedule					
Bench Reservoir Exclosure	Unknown	100	Unknown	Unknown	L
Blowout Reservoir Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	50	25.5
Pronghorn	50	50	8.6
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

Special management areas:
Jordan Craters existing ACEC (Alternatives A, B, C, D, PRMP)
Jordan Craters WSA

BLM allotment name:	**BIRCH CREEK**	Allotment number:	**10506**
Management category:	I	BLM acres:	10,013
AMP implemented:	No	Private acres:	2
Season of use:	03/01-05/15; 11/-02/28	State acres:	0
Active AUM's:	1,099	Other Federal acres:	1,555
Suspended AUM's:	308		
Total AUM's:	1,407	Total acres:	11,570

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Birch Creek	2,969	89	Unknown	Static-Up	D
West Blue Canyon	4,560	100	Late Native	Up	B
Island Field	3,026	60	Unknown	Unknown	D
South Blackrocks	1,015	100	Middle Native	Unknown	B

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities

Management consideration with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	100	40.8
Pronghorn	15	15	2.6
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Birch Creek	Birch Creek	2.4	Unkn							
Birch Creek	Owyhee River	0.6	Up	REDB	Yes					
Island Field	Owyhee River	5.3	Up	REDB	Yes	0.1				

[1] 1998 303(d) list.

Special management areas:
Owyhee River existing ACEC (Alternative B)
Owyhee Views proposed ACEC (Alternatives C, D, D2, PRMP)
Owyhee National Wild and Scenic River
Owyhee Breaks WSA
Blue Canyon WSA
Ertter's groundsel, sterile milkvetch Special Status plants

BLM allotment name:	**BOARD CORRALS**	**Allotment number:**	**10507**
Management category:	I	**BLM acres:**	55,637
AMP implemented:	No	**Private acres:**	1,725
Season of use:	03/01-02/28	**State acres:**	0
Active AUM's:	4,182	**Other Federal acres:**	3,625
Suspended AUM's:	1,778		
Total AUM's:	5,960	**Total acres:**	60,986

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Alkali	18,254	94	Middle Native	Static	A, D
Board Corral	6,874	99	Late Native	Up	B
Wildhorse Basin	16,961	82	Late Native	Static-Up	B
Antelope	17,393	98	Late Native	Up	B
Areas not identified in the annual grazing schedule					
Antelope Spring	18	100	Unknown	Unknown	L
FFR	1,485	48	Unknown	Unknown	J
Alkali Experimental Plots 1 & 2	Unknown	100	Unknown	Unknown	C

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	300	112.1
Pronghorn	50	0	4.3
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
Alkali	Succor Creek	1.4	Up							
Board Corral	Birch Creek	0.9	Static							
Board Corral	Indian Creek	2.6	Static							
Antelope	Antelope Creek	2.5	Unkn							
FFR	Antelope Creek	0.2	Unkn							

FFR	Succor Creek	1.2	Unkn
FFR	Succor Creek	0.2	Up

[1] 1998 303(d) list.

Special management areas:
Owyhee Views Proposed ACEC (Alternatives C, D)
Three Fingers Wild Horse Management area (HMA)
Honeycombs WSA
Wildhorse Basin WSA
Sterile milkvetch, Owyhee clover, smooth blazingstar Special Status plants

BLM allotment name:	**ROCKVILLE**	**Allotment number:**	**10508**
Management category:	I	**BLM acres:**	22,711
AMP implemented:	No	**Private acres:**	1,027
Season of use:	04/01-10/31	**State acres:**	0
Active AUM's:	2,688	**Other Federal acres:**	0
Suspended AUM's:	1,445		
Total AUM's:	4,133	**Total acres:**	23,738

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Top Spray North	5,710	100	Middle Native	Static	A
Top Spray South	4,023	100	Middle Native	Static-Up	A
McBride Creek	7,025	93	Middle Native	Static	A
Rockville Seeding North	2,343	95	Unknown	Static-Down	B
Rockville Seeding South	1,424	94	Poor Seeding	Static-Down	B
Ion	2,528	95	Late Native	Static	B
Areas not identified in the annual grazing schedule					
FFR	685	77	Unknown	Unknown	

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	300	81.5
Pronghorn	50	75	10.7
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Top Spray South	Pole Creek	0.2	Unkn							
McBride Creek	Pole Creek	1.5	Unkn							
McBride Creek	Succor Creek	2.5	Unkn							
Rockville Seeding North		0.1	Unkn							
Rockville Seeding North	McBride Creek	0.7	Unkn							

[1] 1998 303(d) list.

Special management areas:

Smooth blazingstar, Sterile milkvetch Special Status plants

BLM allotment name:	**MAHOGANY MOUNTAIN**	**Allotment number:**	**10509**
Management category:	I	**BLM acres:**	40,142
AMP implemented:	No	**Private acres:**	3,840
Season of use:	03/25-10/31	**State acres:**	0
Active AUM's:	5,683	**Other Federal acres:**	357
Suspended AUM's:	2,811		
Total AUM's:	8,495	**Total acres:**	44,339

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Grasshopper	3,951	97	Late Native	Static	E
Gin	4,225	77	Late Native	Down	E
Mahogany Mountain	6,083	99	Late Native	Static-Up	A
Stove	2,994	99	Late Native	Static	E
Shellrock South	6,698	95	Middle Native	Static-Up	A
Shellrock North	4,616	100	Middle Native	Static	A
Fish Creek	6,491	92	Middle Native	Static-Up	A
Tableland Annex	5,382	86	Late Native	Static	B
Schnable Creek Seeding North	1,538	100	Unknown	Static	E
Areas not identified in the annual grazing schedule					
FFR	1,419	55	Unknown	Unknown	
FFR	942	12	Unknown	Unknown	

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	500	25	107
Pronghorn	50	0	4.3
Elk	40	40	56

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Grasshopper	Willow Creek	1.8	Unkn							
Gin	Willow Creek	3.8	Unkn							
Stove	Willow Creek	0.6	Unkn							

Fish Creek	Fish Creek	1.8	Unkn
Fish Creek	Fish Creek TR 2.7	1.0	Unkn
Fish Creek	Fish Creek TR 2.8	1.0	Unkn
FFR	Fish Creek TR 2.7	0.1	Unkn

[1] 1998 303(d) list.

Special management areas:
Mahogany Ridge ACEC
Riparian habitat on Willow Creek
Owyhee Views Proposed ACEC (Alternatives C, D, D2, PRMP)
Mahogany Ridge existing ACEC (Alternatives A, B, C, D, D2, PRMP)
Ertter's groundsel, Owyhee clover Special Status plants

BLM allotment name:	**SCHNABLE CREEK**	**Allotment number:**	**10510**
Management category:	M	**BLM acres:**	5,575
AMP implemented:	No	**Private acres:**	17
Season of use:	04/01-10/31	**State acres:**	0
Active AUM's:	1,416	**Other Federal acres:**	0
Suspended AUM's:	693		
Total AUM's:	2,109	**Total acres:**	5,592

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
P Pot	4,491	100	Late Native	Static	B
Schnable Creek Seeding South	1,102	98	Unknown	Static	E

[1] Current allotment management objectives:

B) Maintain the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	50	20.4
Pronghorn	250	250	42.9
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

					Water quality		Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Jordan Craters existing ACEC (Alternatives A, B, C, D, D2, PRMP)

Jordan Craters WSA

Sage grouse habitat (special status species)

BLM allotment name:	**TUNNEL CANYON**	**Allotment number:**	**10512**
Management category:	I	**BLM acres:**	13,106
AMP implemented:	No	**Private acres:**	1
Season of use:	03/21-12/31	**State acres:**	0
Active AUM's:	1,380	**Other Federal acres:**	179
Suspended AUM's:	615		
Total AUM's:	1,995	**Total acres:**	13,285

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Tunnel Canyon	9,522	98	Middle Native	Static-Up	E
Basque Brush Control	3,762	100	Middle Native	Static-Down	E

[1] Current allotment management objectives:
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	300	101.9
Pronghorn	15	35	4.3
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee Below the Dam Proposed ACEC (Alternatives A, C, D, D2, PRMP)
Owyhee Views Proposed ACEC (Alternatives C, D, D2, PRMP)
Wildhorse Basin WSA

BLM allotment name:	**VENATOR**	**Allotment number:**	**10605**
Management category:	M	**BLM acres:**	21,353
AMP implemented:	1990	**Private acres:**	7,393
Season of use:	04/01-10/31	**State acres:**	897
Active AUM's:	2,309	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	2,309	**Total acres:**	29,643

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North Field	1,066	57	Middle Native	Unknown	B
Jake Hughes	2,473	92	Late Native	Unknown	A
Steer	2,633	96	Middle Native	Static-Up	B
Homestead	3,024	21	Late Native	Unknown	B
Lower Field	4,593	16	Middle Native	Unknown	B
Heifer	4,007	86	Late Native	Up	A
North Deadman	5,618	93	Middle Native	Up	B
South Deadman	6,273	94	Middle Native	Up	B

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	350	200	112.1
Pronghorn	50	50	8.6
Elk	100	100	14

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**LODGE**	**Allotment number:**	**10901**
Management category:	M	**BLM acres:**	17,436
AMP implemented:	1975	**Private acres:**	89
Season of use:	04/01-10/30	**State acres:**	0
Active AUM's:	3,150	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	3,150	**Total acres:**	17,525

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
West	6,084	100	Unknown	Unknown	H
East	11,441	99	Unknown	Unknown	B

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities
H) Reverse the downward trend of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	100	40
Pronghorn	100	150	21.4
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:
Owyhee Views Proposed ACEC (Alternatives C, D, D2, PRMP)
Jordan Craters existing ACEC (Alternatives A, B, C, D, D2, PRMP)
Owyhee Breaks WSA
Jordan Craters WSA

BLM allotment name:	**SOUTH ALKALI**	Allotment number:	**20100**
Management category:	I	BLM acres:	35,348
AMP implemented:	1992	Private acres:	1,620
Season of use:	03/01-02/28	State acres:	5
Active AUM's:	6,837	Other Federal acres:	56
Suspended AUM's:	767		
Total AUM's:	7,604	Total acres:	37,029

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Tub Mountain	19,189	95	Early Native	Static	A
Sand Hills East	3,756	99	Early Native	Down	A
Sand Hills West	6,636	99	Early Native	Down	A
Alkali Flat	5,344	99	Early Native	Down	A
Henry Gulch	2,918	99	Early Native	Unknown	D
Areas not identified in the annual grazing schedule					
Alkali Springs Exclosure	Unknown	100	Unknown	Unknown	L
Alkali Test Plots 3, 4, and 5	Unknown	100	Unknown	Unknown	C
Alkali Botanical Exclosures (burn and no burn)	Unknown	100	Unknown	Unknown	L
Henry Gulch Stream Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	600	173.2
Pronghorn	25	50	6.4
Elk	50	150	140

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Henry Gulch	Henry Gulch	1.0	Up							

[1] 1998 303(d) list.

Special management areas:
Oregon Trail Proposed ACEC (Alternatives A, C, D, D2, PRMP)
South Alkali Sand Hills Proposed ACEC (Alternatives C, D, D2, PRMP)
Curlew habitat
Oregon Trail
Malheur forget-me-not, Mulford's milkvetch Special Status plants

BLM allotment name:	**ALKALI SPRING**	**Allotment number:**	**20101**
Management category:	I	**BLM acres:**	26,901
AMP implemented:	1991	**Private acres:**	6,742
Season of use:	03/01-02/28	**State acres:**	0
Active AUM's:	5,757	**Other Federal acres:**	11
Suspended AUM's:	7		
Total AUM's:	5,764	**Total acres:**	33,654

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bierman Seeding	3,416	96	Fair Seeding	Static-Up	A
Chicken creek	3,014	57	Middle Native	Static	A
Farewell Bend Seeding	1,586	83	Good Seeding	Up	A
Love Seeding	1,232	99	Middle Native	Static-Down	A
Road canyon	2,157	82	Early Native	Down	A
McCarthy	3,306	83	Early Native	Unknown	A
Badger	355	96	Early Native	Unknown	A
Pine Ridge	1,609	89	Early Native	Unknown	A
Mud Spring Seeding	948	100	Fair Seeding	Unknown	E
East Mud Spring	4,601	93	Unknown	Static-Up	E
West Mud Spring	6,198	95	Unknown	Static-Up	E
Love Reservoir	903	100	Early Native	Unknown	A
Areas not identified in the annual grazing schedule					
FFR	4,359	24	Unknown	Unknown	J
McDowell Spring Exclosure (2)	2	100	Unknown	Unknown	L
Dry Gulch Stream Exclosure	Unknown	100	Unknown	Unknown	L
Birch Creek O.T. Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)
J) Pasture dominated by private land and managed custodial with no specified management objective
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	175	350	107
Pronghorn	25	50	6.4
Elk	10	25	24.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Chicken Creek	Birch Creek	0.3	Unkn							
Mud Spring Seeding	Dry Gulch TR 14.6	1.4	Static							
East Mud Spring	Dry Gulch TR 11.8	0.3	Up							
East Mud Spring	Dry Gulch TR 12.4	3.0	Unkn							
West Mud Spring	Dry Gulch	2.8	Unkn							
West Mud Spring	Dry Gulch TR 11.8	0.2	Up							
West Mud Spring	Dry Gulch TR 14.6	0.1	Static							

[1] 1998 303(d) list.

Special Management emphasis:

Oregon Trail Proposed ACEC (Alternatives A, C, D, D2, PRMP)

Snake River goldenweed Special Status plant

BLM allotment name:	**COTTONWOOD MOUNTAIN**			**Allotment number:**	**20102**
Management category:	I	**BLM acres:**	33,290		
AMP implemented:	1995	**Private acres:**	991		
Season of use:	04/01-10/31	**State acres:**			
Active AUM's:	7,018	**Other Federal acres:**	151		
Suspended AUM's:	365				
Total AUM's:	7,383	**Total acres:**	34,432		

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Poison creek	2,401	78	Middle Native	Static-Up	I
Turrner Creek	6,977	100	Middle Native	Static	A
Kern Creek	16,450	98	Middle Native	Static	A
Morrison	2,136	96	Early Native	Static-Up	A
Hope Butte Seeding	3,932	99	Good Seeding	Static-Down	I, E
Hope Flat Seeding	2,530	94	Poor Seeding	Static	I, E
Areas not identified in the annual grazing schedule					
Poison Creek Reservoir Exclosure	6	100	Unknown	Unknown	L
Cottonwood Mountain Upland Exclosures 1, 2, and 3	Unknown	100	Unknown	Unknown	L
Morrison Reservoir Exclosure	Unknown	100	Unknown	Unknown	L
Hope Butte Pit Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

E) Maintain/improve deer/antelope winter range (eg browse or grass/forb/shrub composition objectives)

I) Maximize availability of fall green-up for winter deer/antelope use

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; no suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	250	81.5
Pronghorn	75	75	12.9
Elk	10	50	42

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Poison Creek	Sheep Corral Creek	0.6	Unkn							
Turner Creek	Mud Creek	0.6	Down							
Turner Creek	Sheep Corral Creek	1.5	Unkn							
Turner Creek	Turner Creek	2.8	Down							
Turner Creek	North Fork Willow Creek TR 2.1	3.0	Unkn							

Kern Creek	Cottonwood Creek- At reservoir	0.5	Up	0.1	0.4	
Kern Creek	Kern Creek	4.4	Unkn			
Kern Creek	Mud Creek	2.0	Down			
Kern Creek	Rock Cabin Creek	4.7	Down			4.7
Kern Creek	Rock Cabin Creek TR 1.9	3.1	Unkn			3.1
Morrison	North Fork Willow Creek TR 2.1	0.2	Unkn			

[1] 1998 303(d) list.

BLM allotment name:	**POALL CREEK**	Allotment number:	**20103**
Management category:	M	BLM acres:	4,080
AMP implemented:	1992	Private acres:	363
Season of use:	04/01-11/30	State acres:	0
Active AUM's:	589	Other Federal acres:	0
Suspended AUM's:	130		
Total AUM's:	179	Total acres:	4,443

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Poall Creek	4,413	92	Middle Native	Static-Up	A
Areas not identified in the annual grazing schedule					
Poall Creek Riparian Exclosure	30	100	Unknown	Unknown	D,L

[1] Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

L) Maintain/improve resource conditions or protect facilities through livestock exclusion

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	125	40.8
Pronghorn	10	25	3
Elk	15	30	31.5

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Poall Creek	Black Creek	3.9	Static							
Poall Creek	Pole Creek	3.2	Down							

[1] 1998 303(d) list

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BLM allotment name:	**WEST BENCH**	Allotment number:	**20104**
Management category:	M	BLM acres:	1,079
AMP implemented:	1993	Private acres:	8
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	193	Other Federal acres:	19
Suspended AUM's:	18		
Total AUM's:	211	Total acres:	1,106

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East	626	100	Early Native	Up	E
West	480	94	Early Native	Static-Up	E

[1] Current allotment management objectives:

E) Maintain/improve deer/antelope winter range

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	125	40.8
Pronghorn	0	0	0
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**WILLOW CREEK LIVESTOCK**	Allotment number:	**20105**
Management category:	M	BLM acres:	3,585
AMP implemented:	1992	Private acres:	85
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	492	Other Federal acres:	155
Suspended AUM's:	492		
Total AUM's:	0	Total acres:	3,824

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East	1,644	95	Early Native	Up	A
West	2,180	92	Early Native	Static	A
Areas not identified in the annual grazing schedule					
Willow Creek Upland Exclosure	Unknown	100	Unknown	Unknown	L

[1] Current allotment management objectives:
A) Improve the ecological condition of upland vegetative communities
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	100	27.5
Pronghorn	0	10	0.9
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

							Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**MCEWEN**	Allotment number:	**20603**
Management category:	M	BLM acres:	62,846
AMP implemented:	1994	Private acres:	38,685
Season of use:	04/01-10/31	State acres:	280
Active AUM's:	6,011	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	6,011	Total acres:	101,811

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Lower Swamp	10,222	44	Late Native	Static	B
Vischer	14,141	35	Middle Native	Static	B
Hickey	13,194	80	Late Native	Up	B
Hughes	9,604	61	Late Native	Static	B
East Swamp Creek	7,615	64	Late Native	Static	B
Stockade	28,587	61	Early Native	Static-Up	B
Duck Pond	12,525	76	Middle Native	Static-Up	B
Big Flat	7,087	72	Middle Native	Static-Up	B
Areas not identified in the annual grazing schedule					
Swamp Creek FFR	4,456	5	Unknown	Unknown	J

[1] Current allotment management objectives:
B) Maintain the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implemenzation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	500	150	132.5
Pronghorn	100	65	90
Elk	50	50	70

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Duck Pond	Crowley Creek	0.8	Unkn							

[1] 1998 303(d) list.

Special management areas:
Juniper population increase in Stockade pasture
Bitterbrush population and vigor for deer range
Stockade Mountain existing ACEC (Alternatives A, B, C, D, D2, PRMP)

Jordan Rescouce Area

BLM allotment name:	**JACKIES BUTTE SUMMER**	Allotment number:	**01101**
Management category:	M	BLM acres:	209,454
AMP implemented:	Yes	Private acres:	21,803
Season of use:	04/01-10/31	State acres:	379
Active AUM's:	14,274	Other Federal acres:	8,608
Suspended AUM's:	0		
Total AUM's:	14,274	Total acres:	240,244

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
China Gulch Seeding North	6,735	100	Excellent Seeding	Static-Up	B
China Gulch Seeding South	3,336	100	Good Seeding	Static-Up	B
Dry Creek Native	65,249	99	Middle Native	Static-Up	B
Skull Creek East	1,499	100	Middle Native	Static	B
Skull Creek West	2,385	100	Late Native	Static	B
Eastside	44,259	100	Middle Native	Static	B
Rome South	33,980	58	Early Native/ Fair Seeding	Static	B
Mill Pasture	5,425	100	Fair Seeding	Static	B
Indian Fort	51,108	99	Middle Native	Static	B
Dry Creek Seeding	8,607	100	Fair Seeding	Static	B
Areas not identified in the annual grazing schedule					
Rome North	11,799	35	Early Native/ Fair Seeding	Static	D, L
Crows Nest Reservoir Exclosure	9	100	Unknown	Unknown	D, L
Hardin Stream Exclosure	72	100	Unknown	Unknown	D, L
Dry Creek Upland Exclosure	2	100	Unknown	Unknown	C, D, L
Owyhee Springs Reservoir Exclosure	4	100	Unknown	Unknown	D, L
Sand Hollow Exclosure	128				O

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

C) Maintain the integrity of research and study plots

D) Maintain/improve the condition of riparian vegetative communities

L) Maintain/improve resource conditions through livestock exclusion; not suitable for livestock use

O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management Considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	150	52
Pronghorn	100	325	137
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Dry Creek Native	Dry Creek	0.4	Down							
Dry Creek Native	Dry Creek	11.7	Unkn							
Eastside	Antelope Creek	0.3	Unkn							
Rome South	Crooked Creek	0.7	Unkn							
Rome South	Owyhee River	1.0	Unkn			1.0				
Rome North	Crooked Creek	1.3	Unkn							
Rome North	Crooked Creek	0.5	Unkn							
Indian Fort	Owyhee River	0.6	Unkn							
Hardin Stex	Dry Creek	0.1	Unkn							

[1] 1998 303(d) list.

Special management areas:

Owyhee River existing ACEC (Alternative B)
Three Forks proposed ACEC (Alternatives D, D2)
Jackies Butte Wildhorse Management Area (HMA)
Antelope Creek Administratively suitable National Wild and Scenic River (Alternatives C, D, D2, PRMP)
Owyhee National Wild and Scenic River
Owyhee Canyon WSA
Redband trout Special Status fish

BLM allotment name:	**AMBROSE-MAHER**	Allotment number:	**01102**
Management category:	C	BLM acres:	3,633
AMP implemented:	No	Private acres:	374
Season of use:	10/15-05/15	State acres:	47
Active AUM's:	517	Other Federal acres:	1,038
Suspended AUM's:	0		
Total AUM's:	517	Total acres:	5,092

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Ambrose-Maher	4,536	91	Middle Native	Static-Up	B, D
Areas not identified in the annual grazing schedule					
Warm Springs Exclosure	556				O

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management consideration with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	20	50	16
Pronghorn	20	20	19
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Ambrose-Maher	Antelope Creek	0.7	Unkn							
Ambrose-Maher	Owyhee River	1.6	Unkn							

[1] 1998 303(d) list.

Special management areas:
Three Forks proposed ACEC (Alternatives D, D2)
Owyhee River existing ACEC (Alternative B)
Antelope Creek Administratively suitable National Wild and Scenic Rivers (Alternatives C, D, D2, PRMP)
Owyhee National Wild and Scenic River
Owyhee Canyon WSA
Redband trout Special Status fish

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BLM allotment name:	**JACKIES BUTTE WINTER**	Allotment number:	**01103**
Management category:	C	BLM acres:	19,357
AMP implemented:	No	Private acres:	834
Season of use:	11/01-01/31	State acres:	0
Active AUM's:	485	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	485	Total acres:	20,191

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Jackies Butte	20,191	96	Early Native/ Good Seeding	Static-Up	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	30	250	67
Pronghorn	40	150	58
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**15-MILE COMMUNITY**	Allotment number:	**01201**
Management category:	I	BLM acres:	317,609
AMP implemented:	No	Private acres:	13,801
Season of use:	03/01-10/31	State acres:	138
Active AUM's:	21,146	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	21,146	Total acres:	331,548

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Frenchie North	10,324	76	Middle Native	Static	B
Jug Spring	3,193	100	Middle Native	Static-Down	B
Green Pond	33,448	100	Middle Native	Static	D
Whitehorse	2,148	98	Middle Native	Static	D
V Pasture	21,433	99	Middle Native	Static	D
Oregon Canyon Brush Control	4,263	100	Middle Native	Static	B
Oregon Canyon Seeding West	2,494	100	Excellent Seeding	Static	B
Oregon Canyon Seeding East	3,047	100	Excellent Seeding	Static	B
Schoolhouse Seeding East	2,678	96	Good Seeding	Static	B
Schoolhouse Seeding West	1,348	81	Good Seeding	Static	B
Etchart Seeding	3,660	98	Good Seeding	Static	B, H
Jaca Seeding	3,536	100	Excellent Seeding	Static	B
McDermitt Seeding East	5,827	100	Fair Seeding	Static	B
McDermitt Seeding West	7,569	100	Fair Seeding	Static	B
Buckbrush	11,795	97	Middle Native	Static	B
Angel Canyon Seeding	4,529	99	Good Seeding	Static	B
Angel Canyon Native	16,711	100	Late Native	Static	B
Blue Mountain	75,347	98	Middle Native	Static	B
Basque Seeding West	1,840	96	Excellent Seeding	Static	B
Basque Seeding East	2,069	100	Excellent Seeding	Static-Up	B
Sheep Corral Brush Control	2,348	100	Middle Native	Static	B
Summit North	1,552	100	Middle Native	Static-Up	B
Summit South	1,681	100	Middle Native	Static	B
Pronghorn	15,083	100	Middle Native	Static	B
Overshoe Seeding South	no data	-			B
Overshoe Seeding North	12,429	100	Excellent Seeding	Static	B
Jackson Creek North	30,645	99	Middle Native	Static-Up	B
Jackson Creek South	7,375	99	Middle Native	Down	H
Twelve Mile Seeding	2,589	100	Excellent Seeding	Static-Up	B
Buckbrush Seeding	2,736	100	Good Seeding	Static-Up	B,I

Cascade Brush Control	13,714	100	Middle Native	Static	B
Dry Creek	3,282	99	Middle Native	Static	D
Burro Seeding	1,864	100	Good Seeding	Static	B
Areas not identified in the annual grazing schedule					
Dolittle Spring Exclosure	8	100	Middle Native	Unknown	D
Mules Ear Reservoir Exclosure	5	100	Unknown	Unknown	D
Blue Mountain Pit Exclosure	4	100	Unknown	Unknown	D
Blue Mountain #4 Reservoir Exclosure	6	100	Unknown	Unknown	D
Cascade (Harper) Reservoir Exclosure	4	100	Unknown	Unknown	D
Dawson Reservoir Exclosure	3	100	Unknown	Unknown	D
Mud Spring Exclosure	3	100	Unknown	Unknown	D
Overshoe Guzzler Exclosure	1	100	Unknown	Unknown	F
Overshoe Seeding Upland Exclosure	2	100	Good Seeding/ Unknown	Unknown	C
Twelve Mile Upland Exclosure (3-Man Butte)	2	100	Unknown	Unknown	C
Bobcat Guzzler Exclosure	2	100	Unknown	Unknown	F
Cotote Guzzler Exclosure	1	100	Unknown	Unknown	F
Dry Ridge Guzzler Exclosure	1	100	Unknown	Unknown	F
Jackson Creek Spring Exclosure	1	100	Unknown	Unknown	D
McDermitt Upland Exclosure	3	100	Unknown	Unknown	C
FFR	1,242	5	Unknown	Unknown	B, J
Private	162	20	Unknown	Unknown	B, J
Oregon Canyon Reservoir Number 2 Exclosure	1	100	Unknown	Unknown	D
Oregon Canyon Reservoir Number 1 Exclosure	4	100	Unknown	Unknown	D
Dinky Reservoir Exclosure	3	100	Unknown	Unknown	D
FFR	7,336	11	Unknown	Unknown	B, J
FFR	1,202	84	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
F) Maintain the integrity of enclosures constructed for wildlife benefits
H) Reverse the downward trend of upland vegetative communities
I) Maximize availability of fall green-up for winter deer/antelope use
J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	550	550	249
Pronghorn	100	190	112

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Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Jug Springs	Dry Creek Trib. Doolittle	1.6	Up							
Green Ponds	Antelope Creek Trib. 15.6	0.5	Unkn							
Green Ponds	Antelope Creek Trib. 16.3	1.9	Unkn							
Green Ponds	Dry Creek	5.1	Unkn							
Green Ponds	Dry Creek Trib. 7.1	1.4	Unkn							
Green Ponds	Fish Creek	1.0	Unkn							
Green Ponds	Little Antelope Creek	4.3	Unkn							
Green Ponds	South Fork Fish Creek	0.3	Unkn							
Green Ponds	Twelvemile Creek	6.6	Unkn							
Green Ponds	Twelvemile Creek Trib. 15.0	2.4	Unkn							
Green Ponds	Whitehorse Creek Trib. 24.3	0.6	Up							
Green Ponds	Whitehorse Creek Trib. 24.3 Trib. 1.2	0.1	Up							
Whitehorse	Whitehorse Creek	2.3	Up							
V Pasture	Cottonwood Creek	0.7	Static							
V Pasture	Cottonwood Creek	6.1	Up							
V Pasture	Oregon Canyon Creek	7.2	Unkn							
V Pasture	Oregon Canyon Creek, E. Fork	4.9	Unkn							
V Pasture	Oregon Canyon Creek, S. Fork	1.8	Unkn							
V Pasture	Oregon Canyon Creek, W. Fork	1.7	Unkn							
V Pasure	Oregon Canyon Creek Trib. 29.7	0.5	Unkn							
V Pasture	Oregon Canyon Trib. 29.8	0.4	Unkn							
V Pasture	Oregon Canyon Trib. 30.6	0.7	Unkn							
V Pasture	S. Fork Oregon Canyon Trib. .5 Trib. .7	0.8	Unkn							
V Pasture	S. Fork Oregon Canyon Trib. .5	1.2	Unkn							
V Pasture	Sheepline Canyon	0.3	Up							
V Pasture	Whitehorse Creek	6.5	Up							
V Pasture	Whitehorse Creek Trib. 24.3	1.0	Up							
V Pasture	Whitehorse Creek Trib. 24.3 Trib. .4	0.8	Up							
V Pasture	Whitehorse Creek Trib. 24.3 Trib. 1.2	0.4	Up							
V Pasture	Whitehorse Creek Trib. 27.2	1.2	Up							
Etchart Seeding	Trail Canyon	0.3	Unkn							
Jaca Seeding	Jaca Creek	0.2	Unkn							

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Angel Canyon Native	Cottonwood Creek	3.3	Unkn
Angel Canyon Native	Fish Creek	2.2	Unkn
Angel Canyon Native	Jaca Creek	1.9	Unkn
Angel Canyon Native	Jaca Creek Trib. 6.7	0.4	Unkn
Angel Canyon Native	Jaca Creek Trib. 7.2	0.2	Unkn
Angel Canyon Native	Jaca Creek Trib. 7.5	0.5	Unkn
Angel Canyon Native	Moonshine Canyon	1.0	Unkn
Angel Canyon Native	Oregon Canyon Creek Trib. 8.3	0.4	Unkn
Angel Canyon Native	Rock Creek	1.5	Unkn
Angel Canyon Native	School House Creek	0.6	Unkn
Angel Canyon Native	Simpson Creek	1.0	Unkn
Angel Canyon Native	Trail Canyon	0.7	Unkn
Angel Canyon Native	Trail Canyon Trib. 1.9	0.9	Unkn
Blue Mountain	Dry Creek	1.5	Unkn
Blue Mountain	Oregon Canyon Creek	0.4	Unkn
Blue Mountain	Oregon Canyon Creek Trib. 27.8	1.3	Unkn
Blue Mountain	Oregon Canyon Trib. 27.9	0.3	Unkn
Blue Mountain	Oregon Canyon Trib. 28.3	1.2	Unkn
Jackson Creek North	Battle Creek Trib. 12.5	0.2	Unkn
Jackson Creek North	Jackson Creek Trib. 5.3	1.9	Unkn
Jackson Creek North	Jackson Creek M. Fork	0.6	Unkn
Jackson Creek North	Oregon Canyon Creek Trib. 17.1 Trib. 10.3	3.2	Unkn
Jackson Creek North	Oregon Canyon Creek Trib. 17.1	3.6	Unkn
Jackson Creek South	Jackson Creek	2.0	Unkn
Jackson Creek South	Jackson Creek Trib. 8.9	0.5	Unkn
Twelvemile Seeding	Dry Creek	1.2	Unkn
Twelvemile Seeding	Twelvemile Creek	2.2	Unkn
Dry Creek	Doolittle Creek	1.0	Up
Dry Creek	Dry Creek Trib. Doolittle	2.6	Up
Dry Creek	Sheepline Canyon	2.6	Up
Doolittle SPEX	Doolittle Creek	0.1	Up
Mules Ear RSEX	Oregon Canyon Creek Trib. 17.1 Trib. 10.3	0.1	Unkn
Blue Mountain #4 RSE	Oregon Canyon Creek Trib. 17.1	0.2	Unkn
Dawson RSEX	Oregon Canyon Creek Trib. 17.1	0.1	Unkn
FFR	Dry Creek	0.1	Unkn
Jug Springs	Doolittle Creek	1.8	Up
Leuscher	Doolittle Creek	1.3	Up
Luescher	Doolittle Creek Trib. .5	0.8	Up

Lueshcer	Fifteenmile Creek	1.2	Up
Luescher	Whitehorse Creek	5.0	Up
Luescher	Whitehorse Creek Trib. 19.2	0.5	Up

[1] 1998 303(d) list.

Special management areas:
Bowden Hills and Trout Creek Mountain Group WSA
Archeology
Whitehorse Basin existing ACEC (Alternatives B, D, D2)
Dry Creek Bench proposed ACEC (Alternatives A, C, D, D2, PRMP)
Mendi Gore Playa proposed ACEC (Alternatives A, C, D, D2, PRMP)
Oregon Canyon Creek Administratively suitable National Wild and Scenic River (Alternative D)
Lahontan cutthroat trout Special Status fish

BLM allotment name:	**MCCORMICK**	Allotment number:	**01202**
Management category:	I	BLM acres:	56,831
AMP implemented:	No	Private acres:	2,068
Season of use:	03/20-10/31	State acres:	0
Active AUM's:	6,301	Other Federal acres:	0
Suspended AUM's:	2,561		
Total AUM's:	8,862	Total acres:	58,899

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Sheepline Brush Control	2,395	97	Middle Native	Static	H
Payne Creek	12,917	92	Late Native	Static	B
Indian Creek	17,552	96	Middle Native	Static-Down	D
Cash Canyon	5,491	100	Early Native	Static	D
Deafenbaugh	13,738	99	Middle Native	Static	D
Bretz Seeding	3,067	100	Excellent Seeding	Static	B
Flat Top Seeding	3,732	99	Poor Seeding	Static-Down	B
Areas not identified in the annual grazing schedule					
Bretz Test Plot	2	100	Unknown	Unknown	C
Bretz Reservoir Exclosure	2	100	Unknown	Unknown	D
Sheepline Spring Exclosure	1	100	Unknown	Unknown	D
Gopher Spring Exclosure	1	100	Middle Native	Unknown	D
Chicken Spring Exclosure	2	100	Unknown	Unknown	D

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

C) Maintain the integrity of research and study plots

D) Maintain/improve the condition of riparian vegetative communities

H) Reverse the downward trend of upland vegetative communities

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	75	39
Pronghorn	30	30	29
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

					Water quality	Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
Sheepline Brush Cont.	Doolittle Creek	1.2	Up							
Sheepline Brush Cont.	Fifteenmile Creek	0.9	Up							
Sheepline Brush Cont.	Sheepline Canyon	0.6	Up							
Payne Creek	East Fork Mine Creek	2.5	Static							
Payne Creek	East Fork Mine Creek Trib. 2.5	0.4	Static							
Payne Creek	Payne Creek	0.6	Up							
Payne Creek	West Fork Mine Creek	3.7	Up							
Indian Creek	Cottonwood Creek	1.0	Up							
Indian Creek	Cowboy Creek	1.7	Up							
Indian Creek	Indian Creek	5.6	Unkn							
Indian Creek	Indian Creek	0.2	Up							
Indian Creek	Indian Creek Trib. 5.5	0.9	Unkn							
Indian Creek	Indian Creek Trib. 8.0	1.3	Unkn							
Indian Creek	Lasa Creek	2.1	Unkn							
Indian Creek	Lasa Creek Trib. 3.3	0.3	Unkn							
Indian Creek	Spring Creek	1.7	Up							
Indian Creek	Spring Creek Trib. 1.7	1.0	Up							
Cash Canyon	Cottonwood Creek	0.6	Unkn							
Cash Canyon	Cottonwood Creek	0.1	Up							
Cash Canyon	Indian Creek	2.5	Unkn							
Cash Canyon	McDermitt Creek	0.1	Unkn							
Cash Canyon	McDermitt Creek	2.9	Up							
Deafenbaugh Rip	Cottonwood Creek	0.1	Unkn							
Deafenbaugh Rip	Cottonwood Creek	2.8	Up							
Deafenbaugh Rip	McDermitt Creek Trib. 8.6	0.8	Unkn							
Gopher Spring SPEX	Doolittle Creek	0.1	Up							

[1] 1998 303(d) list.

Special management areas:

Trout Creek Mountain Group WSAs

Archelogy

Indian Creek Administratively suitable National Wild and Scenic River (Alternative D)

Lahontan cutthroat trout Special Status fish

BLM allotment name:	**ZIMMERMAN**	Allotment number:	**01203**
Management category:	I	BLM acres:	31,688
AMP implemented:	No	Private acres:	1,333
Season of use:	04/01-11/30	State acres:	8
Active AUM's:	5,249	Other Federal acres:	0
Suspended AUM's:	522		
Total AUM's:	5,771	Total acres:	33,029

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain (within Oregon)	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Homestead (includes land within Nevada)	3,360	60	Middle Native	Unknown	D
Payne Creek Seeding	693	100	Excellent Seeding	Static	D
Mine Creek Seeding	1,209	100	Excellent Seeding	Static	D
Pinky	6,101	92	Middle Native	Static	D
Riser (entire pasture within Nevada)	7,710	0	Middle Native	Static	B
Turner	10,167	99	Late Native	Static	D
Dry Creek (includes land within Nevada)	13,115	53	Middle Native	Static	D
Disaster Peak Seeding North	4,775	98	Excellent Seeding	Static-Up	B
Long Ridge (includes land within Nevada)	6,182	4	Unknown	Unknown	A
Areas not identified in the annual grazing schedule					
Disaster Peak Upland Exclosure	3	100	Unknown	Unknown	C
Disaster Peak Reservoir Exclosure	1	100	Unknown	Unknown	D
Homestead FFR (includes land within Nevada)	1,199	4	Unknown	Unknown	J

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

C) Maintain the integrity of research and study plots

D) Maintain/improve the condition of riparian vegetative communities

J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	75	39
Pronghorn	20	20	19
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Homestead	Dry Creek	0.1	Unkn							
Payne Creek Seeding	Payne Creek	2.7	Up							
Mine Creek Seeding	Cowboy Creek	0.2	Up							
Mine Creek Seeding	Hot Creek	0.1	Up							
Mine Creek Seeding	Mine Creek	1.8	Up							
Pinky	Cowboy Creek	2.6	Up							
Pinky	Hot Creek	0.2	Up							
Pinky	McDermitt Creek	0.3	Up							
Pinky	Mine Creek	0.2	Up							
Pinky	Payne Creek	0.6	Up							
Turner	Dry Creek	0.1	Unkn							
Turner	McDermitt Creek	7.6	Up							
Turner	McDermitt Creek Trib. 27.8	1.3	Up							
Turner	McDermitt Creek Trib. 32.3	0.2	Unkn							
Turner	McDermitt Creek Trib. 32.3	0.9	Up							
Turner	N. Fork McDermitt Creek	1.0	Up							
Turner	Turner Creek	2.1	Up							
Dry Creek	Dry Creek	3.1	Unkn							
Dry Creek	Line Canyon	1.4	Up							
Dry Creek	Line Canyon Trib. 2.1	1.2	Up							
Dry Creek	Sage Creek	4.2	Up							
Dry Creek	Sage Creek Trib. 5.8	1.2	Up							
Dry Creek	Sage Creek Trib. 8.1	1.6	Up							
Dry Creek	Sage Creek Trib. 8.1 Trib. 0.9	0.7	Up							
Dry Creek	Sage Creek Trib. 8.8	0.5	Up							
Dry Creek	Sage Creek Trib. 9.0	0.7	Up							
Disaster Peak Seeding	Turner Creek	0.8	Up							
Disaster Peak RSEX	Turner Creek	0.1	Up							
Long Ridge	McDermitt Creek	1.3	Up							

[1] 1998 303(d) list.

Special management areas:

Trout Creek Mountain Group WSAs

McDermitt Creek Administratively suitable National Wild and Scenic River (Alternative D)

North Fork McDermitt Creek Administratively suitable National Wild and Scenic River (Alternative D)

Sage Creek Administratively suitable National Wild and Scenic River (Alternative D)

Lahontan cutthroat trout Special Status fish

BLM allotment name:	**WHITEHORSE BUTTE**	Allotment number:	**01206**
Management category:	I	BLM acres:	124,086
AMP implemented:	Yes	Private acres:	14,502
Season of use:	03/16-08/31	State acres:	166
Active AUM's:	9,287	Other Federal acres:	0
Suspended AUM's:	1,691		
Total AUM's:	10,978	Total acres:	138,754

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
Fish Creek Seeding South	3,845	100	Good Seeding	Static	B
Fish Creek Seeding North	3,345	100	Good Seeding	Static-Up	B
Buckskin Seeding	7,221	86	Excellent Seeding	Static	B
Frenchie South	11,472	57	Middle Native	Static	B
Whitehorse Seeding	3,894	100	Excellent Seeding	Static-Up	B
15-Mile	20,150	98	Middle Native	Static-Up	D
Red Mountain South	29,435	87	Late Native	Static	D
Red Mountain North	27,073	93	Middle Native	Static-Up	A
Willow	25,529	93	Middle Native	Static-Up	D
Willow Butte Seeding	4,505	99	Fair Seeding	Static	B
Areas not identified in the annual grazing schedule					
Willow Creek Stream Exclosure #3	27	100	Unknown	Unknown	D
Willow Creek Stream Exclosure #4	87	100	Unknown	Unknown	D
Willow Creek Stream Exclosure #5	15	100	Unknown	Unknown	D
Willow Creek Stream Exclosure #6	19	100	Unknown	Unknown	D
Willow Creek Stream Exclosure #7	54	100	Unknown	Unknown	D
Upper Willow Creek Stream Exclosure	69	100	Unknown	Unknown	D
Middle Willow Creek Stream Exclosure	25	100	Unknown	Unknown	D
Lower Willow Creek Stream Exclosure	18	100	Unknown	Unknown	D
Campground Stream Exclosure (KOA)	14	100	Unknown	Unknown	D
Beaverdam Stream Exclosure	28	100	Unknown	Unknown	D
Upper Little Whitehorse 1991 Stream Exclosure	130	100	Unknown	Unknown	D
Little Whitehorse #1 Stream Exclosure	35	100	Unknown	Unknown	D
Little Whitehorse #2 Stream Exclosure	13	100	Unknown	Unknown	D
Little Whitehorse #3 Stream Exclosure	54	100	Unknown	Unknown	D
Little Whitehorse #4 Stream Exclosure	37	100	Unknown	Unknown	D
Whitehorse Seeding Upland Exclosure	2	100	Unknown	Unknown	C
Private	4,062	25	Unknown	Unknown	J
Doolittle Cow Camp	135	100	Unknown	Unknown	K

Lower Luescher Stream Exclosure	236	82	Unknown	Unknown	D

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed enclosure with no management objective identified
M) Stabilize meadow soils
N) Manage for aspen regeneration and survival

Management considerations with implementation of the resource management plan

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	400	400	181
Pronghorn	50	50	48
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Fish Creek Seeding South	Fish Creek	0.9	Unkn							
Fish Creek Seeding South	S. Fork Fish Creek	0.7	Unkn							
Fish Creek Seeding North	Fish Creek	2.2	Unkn							
Frenchie South	Antelope Creek	0.4	Unkn							
Frenchie South	Fish Creek	2.5	Unkn							
Frenchie South	Little Antelope Creek	0.5	Unkn							
Whitehouse Seeding	Little Whitehouse Creek	0.7	Up							
15-Mile	Doolittle Creek	2.2	Up							
15-Mile	Fifteenmile Creek	8.8	Up							
15-Mile	Fifteenmile Creek Trib. 4.6	4.0	Up							
15-Mile	Fifteenmile Creek Trib. 9.4	0.8	Up							
15-Mile	Whitehorse Creek Trib. 19.2	0.4	Up							
Red Mountain South	Little Whitehorse Creek	0.2	Up							
Red Mountain South	Willow Creek	0.1	Down							
Red Mountain South	Willow Creek	7.6	Up							
Red Mountain North	Willow Creek	2.8	Down							
Willow	Little Whitehorse Creek	5.2	Up							
Willow	Little Whitehorse Creek Trib. 10.9	3.6	Up							
Willow	North Fork McDermitt Creek	3.5	Up							
Willow	North Fork McDermitt Creek Trib. 2.9	0.5	Up							
Willow	Willow Creek	2.3	Up							

Willow	Willow Creek Trib. 21.8	2.0	Up
Willow	Willow Creek Trib. 26.6	1.9	Up
Willow	Willow Creek Trib. 26.9	2.4	Up
Willow	Willow Creek Trib. 26.9 Trib. 1.2	1.2	Up
Willow	Willow Creek Trib. 26.9 Trib. 2.6	0.3	Up
Willow	Willow Creek Trib. 26.9 Trib. 2.7	0.2	Up
Willow	Willow Creek Trib. 29.4	1.7	Up
Willow Butte Seeding	Willow Creek	0.1	Up
Willow Butte Seeding	Willow Creek Trib. 21.8	0.9	Up
Willow Creek STEX #3	Willow Creek	0.5	Up
Willow Creek EXCL #5	Willow Creek	0.3	Up
Willow Creek EXCL #4	Little Whitehorse Creek	1.2	Up
Upper Willow Creek South	Willow Creek	1.1	Up
Middle Willow Creek	Willow Creek	0.4	Up
Lower Willow Creek South	Willow Creek	0.4	Up
Campground STEX (KOA)	Willow Creek	0.3	Up
Beaverdam STEX	Willow Creek	0.6	Up
Willow Creek #6 STEX	Willow Creek	0.4	Up
Willow Creek #7 STEX	Willow Creek	1.1	Up
Upper Little Whitehorse	Little Whitehorse Creek	1.6	Up
Little Whitehorse #1	Little Whitehorse Creek	0.8	Up
Little Whitehorse #2	Little Whitehorse Creek	0.3	Up
Little Whitehorse #3	Little Whitehorse Creek	1.1	Up
Little Whitehorse #4	Little Whitehorse Creek	0.9	Up
Private	Little Whitehorse Creek	0.7	Up
Doolittle Cow Camp	Doolittle Creek	0.6	Up
Willow Creek STEX #4	Willow Creek	0.4	Up
Lower Luescher	Whitehorse Creek	1.3	Up

[1] 1998 303(d) list.

Special management areas:

Coyote Lake Wild Horse Management Area (HMA)
Trout Creek Mountain Group WSAs
Archeology
Lahontan cutthroat trout Special Status fish
Whitehorse Basin existing ACEC (Alternatives B, D, D2)
Little Whitehorse Creek proposed ACEC (Alternatives A, C, D, D2, PRMP)
North Fork McDermitt Creek Administratively suitable National Wild and Scenic River (Alternative D)
Doolittle Creek Administratively suitable National Wild and Scenic River (Alternative D)
Little Whitehorse Creek Administratively suitable National Wild and Scenic River (Alternative D)
Whitehorse Creek Administratively suitable National Wild and Scenic River (Alternative D)
Willow Creek Administratively suitable National Wild and Scenic River (Alternatives C, D)

BLM allotment name:	**ALBISU-ALCORTA**	Allotment number:	**01304**
Management category:	M	BLM acres:	14,122
AMP implemented:	Yes	Private acres:	783
Season of use:	03/16-10/15	State acres:	0
Active AUM's:	1,006	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	1,006	Total acres:	14,905

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
The Breaks	8,870	92	Late Native	Static-Up	B
Andy Fife	2,784	99	Late Native	Static	A
Lazy T	3,252	99	Early Native	Static	B

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	10	50	14
Pronghorn	15	15	14
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
The Breaks	Shearing Corral Creek	2.4	Unkn							
The Breaks	Tenmile Creek Trib. 8.3	1.3	Unkn							
The Breaks	Tenmile Creek Trib. 9.5	2.2	Unkn							
The Breaks	Tenmile Creek	0.4	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**LOUSE CANYON COMMUNITY**	Allotment number:	**01307**
Management category:	M	**BLM acres:**	132,906
AMP implemented:	No	**Private acres:**	2,444
Season of use:	03/01-10/31	**State acres:**	23
Active AUM's:	11,235	**Other Federal acres:**	758
Suspended AUM's:	0		
Total AUM's:	11,235	**Total acres:**	136,131

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Drummond Basin	15,050	98	Late Native	Static	B
Steer Canyon Seeding	11,272	99	Good Seeding	Static	B
Pole Creek Seeding	15,586	98	Excellent Seeding	Static	A
Louse Canyon	83,777	99	Late Native	Static	B, D
Frenchman Creek Seeding	1,476	100	Excellent Seeding	Static	B
Wilkinson Fence	2,972	70	Unknown	Unknown	B
Areas not identified in the annual grazing schedule					
Rawhide Spring Exclosure	5	100	Unknown	Unknown	D
Steer Canyon (Rawhide) Upland Exclosure	4	100	Unknown	Unknown	C, D
Cold Wind Reservoir Exclosure	7	100	Unknown	Unknown	D
Wilkinson FFR	1,595	86			B, J
Anderson Crossing Exclosure	215				O
Upper West Little Owyhee Exclosure	3,745				O

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial
L) Maintain/improve resource conditions or facilities through livestock exclusion; not suitable for livestock use
O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	150	20	36
Pronghorn	60	0	47
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

					Water quality		Proper functioning condition assessment completed (miles)			
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
Drummond Basin	Antelope Creek	1.1	Unkn							
Drummond Basin	Antelope Creek	0.3	Unkn							
Drummond Basin	Owyhee River	0.5	Unkn							
Drummond Basin	Owyhee River	0.1	Unkn							
Drummond Basin	Pole Creek	0.4	Unkn							
Drummond Basin	West Little Owyhee River	3.0	Unkn							
Steer Canyon Seeding	Field Creek	6.0	Unkn							
Steer Canyon Seeding	Pole Creek Trib. 2.4	0.3	Unkn							
Pole Creek Seeding	Pole Creek	3.4	Unkn							
Louse Canyon	Dry Canyon Trib. 5.0	0.2	Unkn							
Louse Canyon	Dry Canyon Trib. 5.4	0.4	Unkn							
Louse Canyon	Pole Creek Trib. 22.5 Trib. 3.0	0.3	Unkn							
Louse Canyon	West Little Owyhee Trib. 36.8 Trib. 0.6	0.5	Unkn							
Louse Canyon	West Little Owyhee Trib. 36.8 Trib. 0.9	0.4	Unkn							
Louse Canyon	Cavieta Creek	2.1	Unkn							
Louse Canyon	Deep Creek	2.5	Unkn							
Louse Canyon	Dry Canyon Trib. 2.8	0.3	Unkn							
Louse Canyon	Jack Creek	6.8	Unkn							
Louse Canyon	Lake Fork	1.6	Unkn							
Louse Canyon	Massey Canyon	2.9	Unkn							
Louse Canyon	Massey Canyon Trib. 0.1	0.9	Unkn							
Louse Canyon	Massey Canyon Trib. 1.0	1.2	Unkn							
Louse Canyon	Pole Creek	8.0	Unkn							
Louse Canyon	Pole Creek Trib. 2.4	0.2	Unkn							
Louse Canyon	Pole Creek Trib. 8.7	1.0	Unkn							
Louse Canyon	Steer Canyon	2.5	Unkn							
Louse Canyon	Steer Canyon Trib. 7.6	1.6	Unkn							
Louse Canyon	Steer Canyon Trib. 7.6 Trib. 0.2	0.5	Unkn							
Louse Canyon	West Little Owyhee River	4.9	Static							
Louse Canyon	West Little Owyhee River	11.7	Unkn							
Louse Canyon	West Little Owyhee River Trib. 36.8	1.5	Unkn							
Louse Canyon	West Little Owyhee River Trib. 52.2	0.8	Unkn							
Frenchman Creek Seeding	St. Martin Creek	0.4	Unkn							

[1] 1998 303(d) list.

Special management areas:

Upper West Little Owyhee WSA
Owyhee River existing ACEC (alternative B)
Owyhee National Wild and Scenic River
Redband trout Special Status fish

BLM allotment name:	**TEN MILE**	Allotment number:	**01308**
Management category:	M	BLM acres:	3,581
AMP implemented:	No	Private acres:	54
Season of use:	03/16-06/15	State acres:	0
Active AUM's:	664	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	664	Total acres:	3,635

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Ten Mile Seeding	3,635	98	Good Seeding	Static	B

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	5	5	2
Pronghorn	15	15	14
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**BLACK HILL**	Allotment number:	**01309**
Management category:	C	BLM acres:	2,247
AMP implemented:	No	Private acres:	28,217
Season of use:	11/01-02/28	State acres:	0
Active AUM's:	103	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	103	Total acres:	30,464

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Black Hill	30,464	7	Middle Native	Static	B,J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	5	5	2
Pronghorn	15	25	16
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Black Hill	Crooked Creek	0.1	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**ANDERSON**	Allotment number:	**01401**
Management category:	M	BLM acres:	39,319
AMP implemented:	No	Private acres:	88
Season of use:	03/01-07/31	State acres:	73
Active AUM's:	2,857	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	2,857	Total acres:	39,480

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bull Flat	12,959	100	Early Native	Static	A
Spring	8,728	100	Middle Native	Static	A
North	12,122	99	Middle Native	Static	B
Areas not identified in the annual grazing schedule					
Five Bar Exclosure	869				O

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	50	17
Pronghorn	45	20	39
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee River existing ACEC (Alternative B)

Toppin Creek Butte proposed ACEC (Alternatives A, C, D, D2, PRMP)

Owyhee Canyon WSA

Owyhee National Wild and Scenic River

Antelope Creek Administratively suitable National Wild and Scenic River (Alternatives C, D, D2, PRMP)

Redband trout Special Status fish

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BLM allotment name:	**STAR VALLEY COMMUNITY**	Allotment number:	**01402**
Management category:	M	BLM acres:	190,288
AMP implemented:	No	Private acres:	40
Season of use:	03/01-10/31	State acres:	0
Active AUM's:	6,890	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	6,890	Total acres:	190,328

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
North Stoney Corral	57,248	100	Middle Native	Up	A
Tristate Pasture	45,782	100	Middle Native	Static	B
South Tent Creek	50,297	99	Middle Native	Up	A
North Tent Creek	35,343	100	Middle Native	Up	A
Areas not identified in the annual grazing schedule					
Anderson Crossing Exclosure	363				O

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	0	5
Pronghorn	90	0	70
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
South Tent Creek	Jack Creek	0.5	Unkn							
North Tent Creek	West Little Owyhee River	1.2	Unkn							

[1] 1998 303(d) list.

Special management areas:
Owyhee River existing ACEC (Alternative B)
Owyhee Canyon WSA
Upper West Little Owyhee WSA
Lookout Butte WSA
Owyhee National Wild and Scenic River
Davis' peppergrass Special Status plants
Redband trout Special Status fish

BLM allotment name:	**SHEEPHEAD**	Allotment number:	**10702**
Management category:	M	BLM acres:	152,037
AMP implemented:	No	Private acres:	1,102
Season of use:	03/01-02/28	State acres:	602
Active AUM's:	3,949	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	3,949	Total acres:	153,741

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Sheepheads	68,549	99	Middle Native	Static	B
West Ryegrass	16,886	97	Unknown	Unknown	B
Palomino Hills	51,173	99	Late Native	Static	B
East Ryegrass	17,955	94	Late Native	Unknown	B
Areas not identified in the annual grazing schedule					
Bone Creek Reservoir Exclosure	4	100	Unknown	Unknown	D,L
Rock Corral Spring Exclosure	1	100	Unknown	Unknown	D,L
Sheepheads Upland Exclosure	2	100	Unknown	Unknown	C,L

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

C) Maintain the integrity of research and study plots

D) Maintain/improve the condition of riparian vegetative communities

L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	150	89
Pronghorn	75	50	68
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Sheepshead Wild horse Management Area (HMA)

Sand Springs Wild horse Management Area (HMA)

Sheepshead Mountain Group WSA

Saddle Butte WSA

Sheepshead Mountain Group WSA

Sage grouse habitat (special status species)

241

BLM allotment name:	**BARREN VALLEY**	Allotment number:	**10801**
Management category:	M	BLM acres:	12,915
AMP implemented:	No	Private acres:	0
Season of use:	11/01-03/31	State acres:	0
Active AUM's:	204	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	204	Total acres:	12,915

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
South	3,479	100	Late Native	Unknown	B
North	9,433	100	Late Native	Unknown	B
Areas not identified in the annual grazing schedule					
Bedground Reservoir	4	100	Unknown	Unknown	K

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	25	11
Pronghorn	0	25	5
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
South	Dry Creek	0.2	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**BOWDEN HILLS**	Allotment number:	**10803**
Management category:	M	BLM acres:	82,609
AMP implemented:	None	Private acres:	2,244
Season of use:	01/17-03/31	State acres:	0
Active AUM's:	1,927	Other Federal acres:	113
Suspended AUM's:	0		
Total AUM's:	1,927	Total acres:	84,965

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bowden Hills	84,964	97	Late Native	Unknown	B
Areas not identified in the annual grazing schedule					
Bowden Guzzler Exclosure	1	100	Unknown	Unknown	F

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
F) Maintain the integrity of enclosures constructed for wildlife benefits

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	150	57
Pronghorn	100	150	105
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:
Bowden Hills WSA

BLM allotment name:	**COYOTE LAKE**	Allotment number:	**10804**
Management category:	M	BLM acres:	162,858
AMP implemented:	No	Private acres:	15,500
Season of use:	11/01-03/15	State acres:	80
Active AUM's:	3,196	Other Federal acres:	15
Suspended AUM's:	381		
Total AUM's:	0	Total acres:	178,453

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Sand Gap	37,373	98	Middle Native	Static	B
Coyote Lake	159,721	79	Unknown	Unknown	B

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	125	41
Pronghorn	75	120	80
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:
Alvord Desert WSA
Coyote Lake Wild Horse Management Area (HMA)
Davis' peppergrass, Solitary milkvetch Special Status plants

BLM allotment name:	**CROOKED CREEK**	Allotment number:	**10806**
Management category:	C	BLM acres:	1,289
AMP implemented:	No	Private acres:	5,952
Season of use:	11/01-02/28	State acres:	0
Active AUM's:	144	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	144	Total acres:	7,241

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Crooked Creek	7,241	18	Middle Native	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	10	10	5
Pronghorn	50	50	48
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Crooked Creek	Bone Creek	0.4	Unkn							
Crooked Creek	Crooked Creek	0.2	Unkn							

[1] 1998 303(d) list.

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BLM allotment name:	**EAST COW CREEK**	Allotment number:	**10903**
Management category:	M	BLM acres:	45,176
AMP implemented:	1976	Private acres:	1,657
Season of use:	04/01-11/30	State acres:	61
Active AUM's:	6,444	Other Federal acres:	4,092
Suspended AUM's:	1,715		
Total AUM's:	8,159	Total acres:	50,985

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Hooker Creek North	707	100	Excellent Seeding ?	Static	B
Hooker Creek South	1,490	89	Late Native	Static	B
Jordan Valley North	1,375	98	Excellent Seeding?	Static	B
Jordan Valley South	3,757	34	Excellent Seeding?	Static	B
Big Ridge North	1,736	100	Excellent Seeding?	Static	B
Big Ridge South	1,683	100	Excellent Seeding?	Static	B
Barlow Brush Control	5,256	100	Middle Native	Static-Down	H
Cowgill	5,049	92	Middle Native	Static	B
Boulder	9,160	87	Late Native	Static	B
Lava	12,276	97	Late Native	Static	B
Downey Canyon	1,251	100	Good Seeding?	Static-Up	B
Little Sandy West	1,598	100	Excellent Seeding?	Static	B
Little Sandy North East	1,158	100	Excellent Seeding?	Static-Down	H
Little Sandy South	997	100	Excellent Seeding?	Static	B
Bennett North	932	100	Middle Native	Unknown	B
Bennett South	504	86	Middle Native	Unknown	B
Areas not identified in the annual grazing schedule					
Little Sandy Spring Exclosure	3	100	Unknown	Unknown	F
Downey Canyon FFR	2,020	46			B, J
Jim Spring Exclosure	15	100	Unknown	Unknown	F
Cow Creek Upland Exclosure	11	100	Unknown	Unknown	C
Goodyear Reservoir Exclosure	9	100	Unknown	Unknown	K

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
F) Maintain the integrity of enclosures constructed for wildlife benefits
H) Reverse the downward trend of upland vegetative communities
K) Grazed reservoir enclosure with no management objective identified
J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	175	95
Pronghorn	100	150	105
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
	(None known)									

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[1] 1998 303(d) list.

BLM allotment name:	**BOGUS CREEK**	Allotment number:	**10904**
Management category:	C	BLM acres:	3,060
AMP implemented:	No	Private acres:	283
Season of use:	02/16-03/31	State acres:	0
Active AUM's:	250	Other Federal acres:	1,297
Suspended AUM's:	0		
Total AUM's:	250	Total acres:	4,640

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bogus Creek	3,969	91	Early Native	Static-Up	B, J

[1] *Current allotment management objectives:*
1) Maintain the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	125	150	63
Pronghorn	100	150	105
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Bogus Creek	Bogus Creek	3.0	Unkn							

[1] 1998 303(d) list.

Special management areas:
Lower Owyhee WSA
Owyhee River existing ACEC (Alternative B)
Owyhee National Wild and Scenic River
Cultural (Potter Cove)
Redband trout Special Status fish

BLM allotment name:	**OLIVER**	Allotment number:	**10905**
Management category:	M	BLM acres:	20,953
AMP implemented:	No	Private acres:	575
Season of use:	04/01-09/30	State acres:	1,865
Active AUM's:	560	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	560	Total acres:	23,392

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Oliver	6,928	74	Middle Native	Unknown	B

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	75	29
Pronghorn	100	100	96
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Oliver	Cow Creek	0.7	Unkn							
Jordan Craters	Cow Creek	0.5	Unkn							

[1] 1998 303(d) list.

Special management areas:

Jordan Craters WSA

Jordan Craters existing ACEC (Alternatives A, B,C, D, D2, PRMP)-

BLM allotment name:	**MORCOM**	**Allotment number:**	**10907**
Management category:	C	**BLM acres:**	5,051
AMP implemented:	No	**Private acres:**	0
Season of use:	11/01-03/31	**State acres:**	0
Active AUM's:	214	**Other Federal acres:**	981
Suspended AUM's:	0		
Total AUM's:	214	**Total acres:**	6,033

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Morcom	5,866	99	Middle Native	Static-Up	B J
Areas not identified in the annual grazing schedule					
Greeley Bar Exclosure	167				O

[1] *Current allotment management*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial with no specified management objective

O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management considerations with implementations of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	75	26
Pronghorn	10	10	10
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
Morcom	Owyhee River	2.1	Up							
Morcom	Owyhee River	0.3	Up							
Morcom	Owyhee River	0.6	Up							
Morcom	Owyhee River Trib. 64.5	0.4	Unkn							
Morcom	Owyhee River Trib. 64.5	0.1	Unkn							
Morcom	Owyhee River Trib. 65.1	0.2	Unkn							
Morcom	Owyhee River Trib. 65.1	0.9	Unkn							

[1] 1998 303(d) list.

Special management areas:

Lower Owyhee WSA
Owyhee Breaks WSA
Owyhee National Wild and Scenic River
Owyhee River existing ACEC (Alternative B)
Owyhee Views proposed ACEC (Alternatives C, D, D2, PRMP)
Ertter's groundsel Special Status plants
Redband trout Special Status fish

BLM allotment name:	**WROTEN**	**Allotment number:**	**11003**
Management category:	I	**BLM acres:**	16,237
AMP implemented:	No	**Private acres:**	3,681
Season of use:	04/01-11/30	**State acres:**	0
Active AUM's:	2,636	**Other Federal acres:**	279
Suspended AUM's:	330		
Total AUM's:	2,966	**Total acres:**	20,197

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Brickey Springs Seeding	3,334	91	Excellent Seeding	Down	B
Wildcat	2,816	100	Early Native	Static	A
Coffee Pot	6,300	99	Late Native	Static	H
Chicken Creek	6,405	48	Late Native	Up	D, H
Brickey North Seeding	656	100	Excellent Seeding	Unknown	B
Areas not identified in the annual grazing schedule					
FFR	685	63	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
H) Reverse the downward trend of upland vegetative communities
J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	50	17
Pronghorn	40	40	38
Elk	0	10	45

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Chicken Creek	Chicken Creek	1.3	Unkn							
Chicken Creek	Chicken Creek Trib. 2.3	0.2	Unkn							
Chicken Creek	Chicken Creek Trib. 2.8	0.5	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**WILLOW CREEK**	**Allotment number:**	**11004**
Management category:	I	**BLM acres:**	68,690
AMP implemented:	Yes	**Private acres:**	2,199
Season of use:	04/01-08/31	**State acres:**	52
Active AUM's:	10,521	**Other Federal acres:**	1,622
Suspended AUM's:	1,639		
Total AUM's:	12,160	**Total acres:**	72,564

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Dry Lake	9,209	100	Middle Native	Static	B
Indian Canyon West	2,912	100	Late Native	Static	H
Indian Canyon East	2,062	100	Middle Native	Up	H
Flat Creek	7,687	100	Middle Native	Up	B
Flat Creek North	2,669	99	Middle Native	Static-Up	B
Rim Basin Seeding	4,191	100	Excellent Seeding	Static	B
Groundhog	1,648	100	Late Native	Static	A
Willow Creek North	3,275	100	Late Native	Static	B
Frank Maher Flat Brush Control	3,741	99	Middle Native	Static	B
Gluch Seeding West	1,831	100	Excellent Seeding	Static	B
Gluch Seeding East	1,270	99	Excellent Seeding	Static	B
Gluch Seeding North	2,405	100	Excellent Seeding	Static	B
Willow Creek West	6,989	97	Late Native	Up	H
Willow Creek East	5,132	92	Late Native	Up	B
Horse Ridge	4,754	100	Late Native	Up	B
Jaca Seeding West	1,571	100	Excellent Seeding	Static-Up	B
Jaca Seeding East	1,826	88	Excellent Seeding	Static	B
Black Butte	2,395	100	Middle Native	Static-Up	B
Areas not identified in the annual grazing schedule					
Castro Pit Exclosure	1	100	Unknown	Unknown	D
FFR	5,350	75	Unknown	Unknown	B, J
Castro Spring Exclosure					D

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

H) Reverse the downward trend of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	25	27
Pronghorn	75	75	72
Elk	0	25	113

Within range of bighorn sheep

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Willow Creek North	Willow Creek	1.2	Unkn							
Frank Maher Flat Brush Control	Willow Creek	0.7	Unkn							
Gluch Seeding East	Willow Creek	0.5	Unkn							
Willow Creek West	Coburn Creek	0.5	Unkn							
Willow Creek West	Spring Branch Creek	2.1	Unkn							
Willow Creek West	Willow Creek	2.0	Unkn							
Willow Creek East	Horse Creek	0.4	Unkn							
Willow Creek East	Toppin Creek Trib. To Soldier	1.6	Unkn							
Black Butte	Willow Creek	2.7	Unkn							

[1] 1998 303(d) list.

Special management areas:

Owyhee River existing ACEC (Alternative B)
Owyhee National Wild and Scenic River
Owyhee Canyon WSA

BLM allotment name:	**BIGHORN**	**Allotment number:**	**11005**
Management category:	M	**BLM acres:**	5,685
AMP implemented:	Yes	**Private acres:**	0
Season of use:	04/08-12/31; 09/15-12/31	**State acres:**	<1
Active AUM's:	1,040	**Other Federal acres:**	408
Suspended AUM's:	0		
Total AUM's:	1,040	**Total acres:**	6,093

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
East	2,057	100	Unknown	Static	B
West	3,021	100	Unknown	Up	B
Mud Flat	695	100	Unknown	Static-Up	B

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	10	20	7
Pronghorn	10	45	16
Elk	0	0	0

Within range of bighorn sheep

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee River existing ACEC (Alternative B)

Owyhee National Wild and Scenic River

Owyhee Canyon WSA

Redband trout Special Status fish

BLM allotment name:	**EIGUREN INDIVIDUAL**	**Allotment number:**	**11006**
Management category:	C	**BLM acres:**	1,575
AMP implemented:	None	**Private acres:**	2,533
Season of use:	Undefined	**State acres:**	0
Active AUM's:	301	**Other Federal acres:**	40
Suspended AUM's:	0		
Total AUM's:	301	**Total acres:**	4,148

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Eiguren Individual	4,148	39	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	50	20
Pronghorn	50	75	53
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
Eiguren Individual	Jordan Creek	0.1	Unkn							
Eiguren Individual	Jordan Creek	1.7	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**ROME INDIVIDUAL**	**Allotment number:**	**11007**
Management category:	C	BLM acres:	2,319
AMP implemented:	No	Private acres:	311
Season of use:	Undefined	State acres:	0
Active AUM's:	70	Other Federal acres:	138
Suspended AUM's:	0		
Total AUM's:	70	Total acres:	2,768

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Rome Individual	2,768	89	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	50	20
Pronghorn	15	15	14
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Rome individual	Jordan Creek	0.1	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**WHITEHORSE**	**Allotment number:**	**11008**
Management category:	I	**BLM acres:**	26,195
AMP implemented:	Yes	**Private acres:**	764
Season of use:	04/08-06/15	**State acres:**	2
Active AUM's:	4,391	**Other Federal acres:**	1,909
Suspended AUM's:	0		
Total AUM's:	4,391	**Total acres:**	28,871

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective[1]
Pastures identified in the annual grazing schedule					
East	14,564	98	Unknown	Down	A
West	10,848	100	Unknown	Static	A

[1] *Current allotment management objectives:*

A) Improve the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	300	83
Pronghorn	60	40	54
Elk	0	25	113

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Three Forks and Owyhee River ACECs
Owyhee National Wild and Scenic River
Owyhee Canyon WSA
Redband trout Special Status fish
Three Forks proposed ACEC (Alternatives D, D2)
Owyhee River existing ACEC (Alternative B)

BLM allotment name:	**PARSNIP PEAK**	**Allotment number:**	**11009**
Management category:	C	**BLM acres:**	726
AMP implemented:	No	**Private acres:**	1,026
Season of use:	Undefined	**State acres:**	0
Active AUM's:	126	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	126	**Total acres:**	1,752

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Parsnip Individual	1,752	41	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	170	62
Pronghorn	15	0	12
Elk	0	25	113

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**SKINNER INDIVIDUAL**	Allotment number:	**11010**
Management category:	C	BLM acres:	3,082
AMP implemented:		Private acres:	3,272
Season of use:	Undefined	State acres:	0
Active AUM's:	178	Other Federal acres:	878
Suspended AUM's:	0		
Total AUM's:	178	Total acres:	7,232

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Skinner Individual	7,232	43	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	50	20
Pronghorn	75	75	72
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**ANTELOPE INDIVIDUAL**	**Allotment number:**	**11011**
Management category:	**C**	**BLM acres:**	**608**
AMP implemented:	**No**	**Private acres:**	**1,247**
Season of use:	**Undefined**	**State acres:**	**0**
Active AUM's:	**54**	**Other Federal acres:**	**0**
Suspended AUM's:	**0**		
Total AUM's:	**54**	**Total acres:**	**1,856**

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Antelope Individual	1,856	33	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	50	20
Pronghorn	15	15	14
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Antelope Individual	Jordan Creek	0.4	Unkn							

[1] 1998 303(d) list.

BLM allotment name:	**MILLER INDIVIDUAL**	Allotment number:	**11012**
Management category:	C	BLM acres:	1,087
AMP implemented:	None	Private acres:	1,159
Season of use:	Undefined	State acres:	0
Active AUM's:	117	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	117	Total acres:	2,246

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Miller Individual	2,246	48	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	50	20
Pronghorn	15	15	14
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**DANNER INDIVIDUAL**	**Allotment number:**	**11013**
Management category:	C	**BLM acres:**	329
AMP implemented:	None	**Private acres:**	289
Season of use:	Undefined	**State acres:**	0
Active AUM's:	33	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	33	**Total acres:**	618

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Danner Individual	618	53	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	35	50	20
Pronghorn	10	10	10
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**CHERRY CREEK**	Allotment number:	**11014**
Management category:	C	BLM acres:	824
AMP implemented:	None	Private acres:	0
Season of use:	04/08-06/15	State acres:	0
Active AUM's:	66	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	66	Total acres:	824

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Cherry Creek	610	100	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	150	57
Pronghorn	35	35	34
Elk	25	25	225

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee National Wild and Scenic River

Redband trout Special Status fish

BLM allotment name:	**LITTLE ANTELOPE**	Allotment number:	**11015**
Management category:	C	BLM acres:	497
AMP implemented:	None	Private acres:	0
Season of use:	Undefined	State acres:	0
Active AUM's:	109	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	109	Total acres:	497

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Little Antelope	497	100	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	25	65	21
Pronghorn	5	0	4
Elk	0	0	0

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

BLM allotment name:	**SHERBURN**	Allotment number:	**11303**
Management category:	M	BLM acres:	45,338
AMP implemented:	Yes	Private acres:	596
Season of use:	03/01-11/30	State acres:	0
Active AUM's:	3,771	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	3,771	Total acres:	45,934

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Bankofier Seeding	4,073	98	Excellent Seeding	Static	B
High Peak	17,292	98	Late Native	Static	B
Hanson Flat North	12,812	99	Late Native	Static	B
Hanson Flat South	7,923	99	Late Native	Static	B
High Peak seeding	2,600	100	Excellent Seeding	Unknown	B
Areas not identified in the annual grazing schedule					
FFR	1,234	99	Unknown	Unknown	B, J

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

J) Pasture dominated by private land and managed custodial

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	50	28
Pronghorn	75	0	59
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles) PFC	FARU	FARN	FARD	NF
Bankofier Seeding	Oregon Canyon Creek Trib. 10.3	0.1	Unkn							
High Peak	Cottonwood Creek	3.2	Unkn							
High Peak	Oregon Canyon Creek Trib. 10.3	0.5	Unkn							
High Peak	Tenmile Creek Trib. 11.6	2.3	Unkn							
High Peak	Tenmile Creek	5.1	Unkn							
Hanson Flat North	Hanson Flat Creek Trib. 4.7	0.2	Unkn							
Hanson Flat North	Antelope Creek Trib. 21.5	0.1	Unkn							
Hanson Flat North	Hanson Flat Creek	0.6	Unkn							
Hanson Flat North	Hanson Flat Creek Trib. 5.7	0.2	Unkn							

Hanson Flat North	Tenmile Creek Trib. 11.6	0.1	Unkn
Hanson Flat North	Tenmile Creek Trib. 16.2	1.3	Unkn
Hanson Flat North	Tenmile Creek	1.4	Unkn
Hanson Flat North	Trail Creek	2.9	Unkn
Hanson Flat North	Trail Creek Trib. 3.0	0.4	Unkn
Hanson Flat South	Trail Creek Trib. 3.0 Trib. 0.6 Trib. 1.8	0.2	Unkn
Hanson Flat South	Tenmile Creek Trib. 11.6	0.1	Unkn
Hanson Flat South	Trail Creek	3.1	Unkn
Hanson Flat South	Trail Creek Trib. 3.0	1.1	Unkn
Hanson Flat South	Trail Creek Trib. 5.3	1.7	Unkn
Hanson Flat South	Trail Creek Trib. 5.7	1.7	Unkn

[1] 1998 303(d) list.

BLM allotment name:	**EIGUREN**	**Allotment number:**	**11305**
Management category:	M	**BLM acres:**	67,329
AMP implemented:	Yes	**Private acres:**	437
Season of use:	03/05-11/31	**State acres:**	0
Active AUM's:	5,799	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	5,799	**Total acres:**	67,765

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Eiguren North	15,306	100	Middle Native	Static	B
Eiguren South	18,784	99	Middle Native	Static	B
Winter Area North	4,482	100	Early Native	Static	A
Winter Area South	2,863	94	Middle Native	Static	A
Chimney Creek	20,098	99	Middle Native	Static	B
Beber Seeding	1,987	87	Excellent Seeding	Static-Down	B
Bull Creek Seeding	4,230	100	Good Seeding	Static-Up	B
Areas not identified in the annual grazing schedule					
Rattlesnake #2 Reservoir Exclosure	11	100	Unknown	Unknown	D
Chimney Guzzler Exclosure	2	100	Unknown	Unknown	F
Little Grassy Guzzler Exclosure	2	100	Unknown	Unknown	F

[1] *Current allotment management objectives:* 1 Current allotment management objectives:

A) Improve the ecological condition of upland vegetative communities

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

F) Maintain the integrity of enclosures constructed for wildlife benefits

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	50	28
Pronghorn	70	45	63
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Eiguren North	Rattlesnake Creek	2.1	Unkn							
Eiguren South	Antelope Creek	0.3	Unkn							
Eiguren South	Little Rattlesnake Creek	2.6	Unkn							

Elburen South	Rattlesnake Creek	4.9	Unkn
Winter Area South	Rattlesnake Creek	0.1	Unkn
Chimney Creek	Rattlesnake Creek	0.8	Unkn
Rattlesnake #2 RSEX	Little Rattlesnake Creek	0.2	Unkn

[1] 1998 303(d) list.

Special management areas:

Rattlesnake Creek Administratively suitable National Wild and Scenic River (Alternative D)

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BLM allotment name:	**CAMPBELL**	Allotment number:	**11306**
Management category:	M	BLM acres:	158,938
AMP implemented:	No	Private acres:	84
Season of use:	03/01-10/15	State acres:	0
Active AUM's:	14,154	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	14,154	Total acres:	159,021

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Twin Springs South	9,824	100	Late Native	Static-Down	B
Twin Springs North	14,793	100	Late Native	Static-Up	B
Twin Springs Middle	7,166	99	Late Native	Static-Up	B
Peacock	28,583	100	Late Native	Static-Up	B
Sacramento Hill	19,355	99	Late Native	Static-Up	B
Starvation Seeding	15,472	100	Excellent Seeding	Static-Up	B
Horse Hill	42,024	100	Late Native	Static	B
Lorribeau Holding	1,784	97	Late Native	Unknown	B
Starvation Brush Control	19,024	100	Late Native	Static	B
Areas not identified in the annual grazing schedule					
Sacramento Hill Upland Exclosure	7	100	Unknown	Unknown	C
Peacock Upland Exclosure	2	100	Unknown	Unknown	C
Bell Spring Exclosure	7	100	Unknown	Unknown	D
Five Point Reservoir Exclosure	9	100	Unknown	Unknown	K
Lucky Seven FFR	2,940	88	Unknown	Unknown	J
Upper West Little Owyhee Exclosure	963				O

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed reservoir enclosure with no management objective identified
O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	10	10	5
Pronghorn	100	50	87
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

					Water quality	Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	limited[1]	PFC	FARU	FARN	FARD	NF
Twin Springs South	Antelope Creek	0.8	Unkn							
Twin Springs Middle	Antelope Creek	2.6	Unkn							
Sacramento Hill	Antelope Creek	6.3	Unkn							
Sacramento Hill	Antelope Creek Trib. 6.5	0.8	Unkn							
Sacramento Hill	Field Creek	0.9	Unkn							
Starvation Seeding	Antelope Creek	9.7	Unkn							
Starvation Seeding	Field Creek	0.1	Unkn							
Horse Hill	Antelope Creek	13.4	Unkn							
Horse Hill	Antelope Creek Trib. 17.0	0.7	Unkn							
Horse Hill	Antelope Creek Trib. 21.5	0.5	Unkn							
Horse Hill	Antelope Creek Trib. 41.6	0.7	Unkn							
Horse Hill	Antelope Creek Trib. 41.9	1.0	Unkn							
Horse Hill	Antelope Creek Trib. 42.4	1.4	Unkn							
Horse Hill	Field Creek	8.7	Unkn							
Horse Hill	Steer Canyon Trib. 7.6 Trib. 0.2	1.4	Unkn							
Horse Hill	Trail Creek	1.1	Unkn							
Horse Hill	West Little Owyhee River	0.4	Static							
Lorribeau Holding	West Little Owyhee River	2.0	Static							
Bell Spring SPEX	Antelope Creek Trib. 42.4	0.2	Unkn							
Starvation Brush Control	Antelope Creek	5.8	Unkn							
Starvation Brush Control	Antelope Creek Trib. 17.0	0.1	Unkn							
Starvation Brush Control	Field Creek	0.2	Unkn							

[1] 1998 303(d) list.

Special management areas:

Owyhee National Wild and Scenic River
Upper West Little Owyhee WSA
Owyhee Canyon WSA
Antelope Creek Administratively suitable National Wild and Scenic River (Alternatives C, D)

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BLM allotment name:	**SADDLE BUTTE**	Allotment number:	**20805**
Management category:	M	BLM acres:	174,767
AMP implemented:	Yes	Private acres:	8,844
Season of use:	11/01-03/31	State acres:	623
Active AUM's:	6,314	Other Federal acres:	3,908
Suspended AUM's:	0		
Total AUM's:	6,314	Total acres:	188,142

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Saddle Butte	187,651	93	Unknown	Unknown	B
Areas not identified in the annual grazing schedule					
Chuckar Guzzler Exclosure	2	100	Unknown	Unknown	D
Rim Guzzler Exclosure	2	100	Unknown	Unknown	D
Clark Guzzler Exclosure	1	100	Unknown	Unknown	D
Bull Creek Exclosure	76				O
Ryegrass Exclosure	143				O
Sand Spring Exclosure	36				O
Granite Creek Exclosure	4				O
Fletcher Trails Exclosure	227				O

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

O) Domestic livestock grazing permanently eliminated in accordance with the Order of Modified Injunction; Civil No. 98-97-RE

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	200	100	66
Pronghorn	225	465	259
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	Proper functioning condition assessment completed (miles)				
						PFC	FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Sand Springs Wild Horse Management Area (HMA)
Lower Owyhee WSA
Saddle Butte WSA
Owyhee National Wild and Scenic River
Solitary milkvetch, Davis' peppergrass, Cusick's chaenactis Special Status plants
Redband trout Special Status fish
Owyhee River existing ACEC (Alternative B)
Palomino Playa proposed ACEC (Alternatives A, C, D, D2, PRMP)
Saddle Butte Lava Tubes existing ACEC (Alternatives B, C, D, D2, PRMP)

BLM allotment name:	**WEST COW CREEK**	Allotment number:	**20902**
Management category:	M	BLM acres:	137,371
AMP implemented:	Yes	Private acres:	2,633
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	9,591	Other Federal acres:	3,321
Suspended AUM's:	2,309		
Total AUM's:	11,900	Total acres:	143,325

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Riley Horn	11,352	100	Middle Native	Static	B
Mud Creek East	7,368	100	Middle Native	Static-Up	A
Mud Creek West	11,052	100	Middle Native	Static-Up	A
Bogus Creek Seeding	4,820	100	Excellent Seeding	Static	A
Navarro V Seeding	8,844	?	Good Seeding	Static-Up	B
West Crater Brush Control	17,928	99	Middle Native	Static	B
Clarks Butte	26,187	99	Middle Native	Static	B
Spray	8,934	100	Excellent Seeding	Static-Up	B
Arock	15,928	97	Good Seeding	Static-Up	A
Owyhee Butte #1	3,650	100	Excellent Seeding	Static	B
Owyhee Butte #2	2,713	100	Excellent Seeding	Static	B
Owyhee Butte #3	1,729	100	Excellent Seeding	Static	B
Owyhee Butte #4	3,109	99	Excellent Seeding	Static	B
Dog Lake East	6,250	100	Early Native	Static	B
Dog Lake West	5,751	99	Early Native/ Excellent Seeding	Static	B
Annex East	1,120	100	Middle Native	Unknown	B
Annex West	933	100	Middle Native	Unknown	B
Areas not identified in the annual grazing schedule					
Owyhee Butte Upland Exclosure	7	100	Unknown	Unknown	D
Mud Flat Upland Exclosure	2	100	Unknown	Unknown	D
Bogus Creek Stream Exclosure #1 (Bench)	13	100	Unknown	Unknown	D
Bogus Creek Stream Exclosure #2 (Falls)	10	100	Unknown	Unknown	D
Bogus Creek Stream Exclosure #3 (Runaway)removed?	10	100	Unknown	Unknown	D
Bogus Creek Stream Exclosure #4 (Lowest)	7	100	Unknown	Unknown	D
Indian Camp Upland Exclousre	13	100	Unknown	Unknown	D?
Bogus Lake Exclosure	33	100	Unknown	Unknown	D?
Owyhee Butte BB Exclosure #1	2	100	Unknown	Unknown	A
Owyhee Butte BB Exclosure #2	1	100	Unknown	Unknown	I
Dog Lake Reservoir Exclosure	3	100	Unknown	Unknown	A

[1] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
D) Maintain/improve the condition of riparian vegetative communities
I) Maximize availability of fall green-up for winter deer/antelope use

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	250	350	138
Pronghorn	250	250	240
Elk	0	0	0
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Bogus Creek Seeding	Bogus Creek	0.1	Unkn							
Navarro V Seeding	Bogus Creek	0.7	Unkn							
Navarro V Seeding	Crooked Creek	0.4	Unkn							
Navarro V Seeding	Crooked Creek	1.6	Unkn							
Navarro V Seeding	Owyhee River	9.8	Unkn							
Navarro V Seeding	Owyhee River	1.2	Unkn							
West Crater Brush Control	Bogus Creek	0.1	Up							
Spray	Bogus Creek	0.1	Unkn							
Bogus Stream EXCL #1	Bogus Creek	0.2	Up							
Bogus Creek STEX #2	Bogus Creek	0.2	Up							
Bogus Creek STEX #3	Bogus Creek	0.2	Up							
Bogus Creek STEX #4	Bogus Creek	0.1	Up							

[1] 1998 303(d) list.

Special management areas:
Lower Owyhee WSA
Jordan Craters WSA
Clarks Butte WSA
Owyhee National Wild and Scenic River
Redband trout Special Status fish
Owyhee River existing ACEC (Alternative B)
Jordan Craters existing ACEC (Alternatives A, B, C, D, D2, PRMP)
Owyhee Views proposed ACEC (Alternatives C, D, D2, PRMP)

BLM allotment name:	**AROCK**	Allotment number:	**21001**
Management category:	M	BLM acres:	66,249
AMP implemented:	Yes	Private acres:	1,208
Season of use:	04/01-10/15	State acres:	1,227
Active AUM's:	11,045	Other Federal acres:	3,230
Suspended AUM's:	492		
Total AUM's:	11,537	Total acres:	71,913

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Tankey East	4,198	100	Middle Native	Static	B
Tankey West	5,476	96	Middle Native	Static	B
Monument South Seeding	2,546	99	Excellent Seeding	Static	B
Dry Creek West	4,529	99	Excellent Seeding	Static-Up	B
Dry Creek East	4,399	100	Excellent Seeding	Static-Up	B
Rock Creek Seeding	3,151	100	Excellent Seeding	Static	B
Noon	7,293	100	Late Native	Static-Up	B
Little Grassy South	3,848	84	Early Native	Unknown	B
Little Grassy North	8,072	97	Middle Native	Unknown	B
Monument Native North	3,119	100	Early Native	Static	B
Bull Pasture	1,727	95	Middle Native	Static	D
Field #1	2,419	99	Excellent Seeding	Static	B
Field #2	1,463	99	Excellent Seeding	Static-Up	B
Field #3	3,070	100	Excellent Seeding	Static-Up	B
Field #4	2,036	100	Excellent Seeding	Static	B
Field #5	2,011	100	Excellent Seeding	Static-Up	B
Round Mountain North	2,044	100	Excellent Seeding	Static	B
Round Mountain South	2,117	100	Excellent Seeding	Static	B
Pinto Horse	5,076	89	Middle Native	Static-Up	B
Areas not identified in the annual grazing schedule					
Rock Creek Reservoir Exclosure	8	100	Unknown	Unknown	D
Noon Reservoir Exclosure	16	100	Unknown	Unknown	D

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

D) Maintain/improve the condition of riparian vegetative communities

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Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	450	130
Pronghorn	100	100	96
Elk	0	15	68
Within bighorn sheep range			

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee River existing ACEC (Alternative B)
Owyhee Canyon WSA
Owyhee National Wild and Scenic River
Redband trout Special Status fish

BLM allotment name:	**ANTELOPE**	Allotment number:	**21002**
Management category:	I	BLM acres:	51,443
Number of pasture(s):	19 (15 w/ Antelope Reservoir 4)	Private acres:	492
AMP implemented:	Yes	State acres:	0
Season of use:	04/01-09/30	Other Federal acres:	142
Active AUM's:	9,964		
Suspended AUM's:	0	Total acres:	52,076
Total AUM's:	9,964		

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Parsnip East	2,781	100	Unknown	Unknown	H
Antelope West	2,047	100	Excellent Seeding	Static-Up	B
Antelope East	2,117	96	Excellent Seeding	Static	B
Sheep Spring Seeding	798	100	Excellent Seeding	Static	B
Soldier Creek Seeding Southeast	498	100	Excellent Seeding	Static	B
Soldier Creek Seeding East	959	91	Excellent Seeding	Static	B
Soldier Creek Seeding West	1,061	94	Excellent Seeding	Static	B
Greeley North	3,384	99	Excellent Seeding	Static	B
Greeley South	3,684	100	Excellent Seeding	Static	B
Rock	11, 491	100	Late Native	Static	B
Black Butte North	2,324	100	Late Native	Static	B
Black Butte South	2,611	100	Middle Native	Static-Up	B
Parsnip West	7,213	99	Middle Native	Static-Down	H
Antelope Flat	4,790	100	Good Seeding	Static-Down	H
Cantor	4,341	93	Early Native	Unknown	B
Areas not identified in the annual grazing schedule					
Greeley Annex Reservoir Exclosure	486	100	Early Native	Unknown	D
Native Annex Reservoir Exclosure	753	100	Middle Native	Unknown	D
Seeding Annex Reservoir Exclosure	628	100	Early Native	Unknown	D
CCC (Jordan Valley) Upland Exclosure	67	100	Unknown	Unknown	C
Parsnip Peak Exlosure	2	100	Unknown	Unknown	D
Tom Skinner Reservoir Exclosure	5	100	Unknown	Unknown	D
Cantor Corral Pit Exclosure	4	100	Unknown	Unknown	D
Antelope Rim Spring Exclosure	4	100	Unknown	Unknown	D
Gluch Pit Eclosure	4	100	Unknown	Unknown	D
Cantor Corral Spring Exclosure	2	100	Unknown	Unknown	D
Hicks Canyon Reservoir Exclosure	5	100	Unknown	Unknown	D
Gluch Spring Exclosure	3	100	Unknown	Unknown	D

Round Peak Spring Exclosure	7	100	Unknown	Unknown	D
Sagehen Upland Exclosure	4	100	Unknown	Unknown	C

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
H) Reverse the downward trend of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	100	300	94
Pronghorn	100	100	96
Elk	0	50	225

Pastures with riparian and DEQ water quality considerations:

						Proper functioning condition assessment completed (miles)				
Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
Parsnip East	Spring Creek	0.6	Unkn							
Sheep Spring Seeding	Sheep Spring Creek Trib. 7.7	1.2	Unkn							
Black Butte South	Willow Creek	0.1	Unkn							
Parsnip West	Trib no. 1 to Antelope Reservoir	0.6	Unkn							
Parsnip West	Trib no. 2 to Antelope Reservoir	1.2	Unkn							
Antelope Flat	Trib no. 2 to Antelope Reservoir	0.4	Unkn							
Antelope Flat	Trib no. 3 to Antelope Reservoir	0.2	Unkn							
Gluch SPEX	Spring Creek	0.1	Unkn							
Sagehen UPEX	Trib no. 3 to Antelope Reservoir	0.1	Unkn							

[1] 1998 303(d) list.

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BLM allotment name:	**RATTLESNAKE**	Allotment number:	**21003**
Management category:	C	BLM acres:	1,314
Number of pasture(s):	1	Private acres:	0
AMP implemented:	None	State acres:	1,837
Season of use:	Undefined	Other Federal acres:	625
Active AUM's:	374		
Suspended AUM's:	0	Total acres:	3,775
Total AUM's:	374		

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Areas not identified in the annual grazing schedule					
Rattlesnake Individual FFR #1	3,296	44	Unknown	Unknown	B
Rattlesnake Individual FFR #2	1,297	63	Unknown	Unknown	B
Rattlesnake Individual FFR #3	2,566	13	Unknown	Unknown	B
Rattlesnake Individual FFR #4	1,528	92	Unknown	Unknown	B

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	50	23
Pronghorn	10	25	12
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
	(None known)									

[1] 1998 303(d) list.

Special management areas:

Owyhee Canyon WSA

Owyhee National Wild and Scenic River

Owyhee River existing ACEC (Alternative B)

Redband trout Special Status fish

BLM allotment name:	**GILBERT**	Allotment number:	**21301**
Management category:	M	BLM acres:	55,581
AMP implemented:		Private acres:	508
Season of use:	04/01-10/31	State acres:	0
Active AUM's:	4,480	Other Federal acres:	0
Suspended AUM's:	0		
Total AUM's:	4,480	Total acres:	56,089

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Battle Creek North	5,827	99	Late Native	Static	B
Battle Creek South	5,922	99	Late Native	Static-Up	B
Woolhawk	17,920	99	Middle Native	Static	B
Battle Mountain	14,436	99	Middle Native	Static	B
Rattlesnake	11,979	99	Middle Native	Static-Up	B
Areas not identified in the annual grazing schedule					
Joe Spring Exclosure	3	100	Unknown	Unknown	D
Deer Creek Spring Exclosure	3	100	Unknown	Unknown	D

[1] *Current allotment management objectives:*
B) Maintain the ecological condition of upland vegetative communities

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	75	5	17
Pronghorn	100	25	83
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	FARU	FARN	FARD	NF
						Proper functioning condition assessment completed (miles)				
Woolhawk	Battle Creek Trib. 0.8	0.5	Unkn							
Woolhawk	Rattlesnake Creek	8.2	Unkn							
Woolhawk	Woolhawk Canyon	7.2	Unkn							
Battle Mountain	Battle Creek	2.2	Unkn							
Battle Mountain	Battle Creek Trib. 12.5	3.7	Unkn							
Battle Mountain	Deer Creek	2.5	Unkn							
Battle Mountain	Isaac Canyon	0.8	Unkn							
Rattlesnake	Battle Creek	2.3	Unkn							
Rattlesnake	Rattlesnake Creek	2.3	Unkn							

[1] 1998 303(d) list.

Special management areas:
Rattlesnake Creek Administratively suitable National Wild and Scenic River (Alternative D)

BLM allotment name:	**ECHAVE**	**Allotment number:**	**21302**
Management category:	M	**BLM acres:**	17,709
AMP implemented:	Yes	**Private acres:**	0
Season of use:	05/01-10/15	**State acres:**	0
Active AUM's:	1,595	**Other Federal acres:**	0
Suspended AUM's:	0		
Total AUM's:	1,595	**Total acres:**	17,709

Pasture/area characteristics and objectives:

Pasture/Areas	Acreage	% Public domain	Upland Condition	Upland Trend	Objective [1]
Pastures identified in the annual grazing schedule					
Battle Mountain	5,978	100	Late Native	Static	B
Rattlesnake	4,814	100	Late Native	Static	B
Antelope Flat	6,915	100	Middle Native	Static-Up	H
Areas not identified in the annual grazing schedule					
Antelope Flat Upland Exclosure	1	100	Unknown	Unknown	C
East Battle Mountain Spring Exclosure	1	100	Unknown	Unknown	D
Echave Reservoir Enclosure	12	100			K

[1] *Current allotment management objectives:*

B) Maintain the ecological condition of upland vegetative communities

C) Maintain the integrity of research and study plots

D) Maintain/improve the condition of riparian vegetative communities

H) Reverse the downward trend of upland vegetative communities

K) Grazed reservoir enclosure with no management objective identified

Management considerations with implementation of the resource management plan:

Provide habitat for:

Species	Summer	Winter	Forage demand (AUM)
Deer	50	5	12
Pronghorn	125	0	98
Elk	0	0	0

Within bighorn sheep range

Pastures with riparian and DEQ water quality considerations:

Pasture	Stream	Miles	Trend	Fish	Water quality limited[1]	PFC	Proper functioning condition assessment completed (miles) FARU	FARN	FARD	NF
Battle Mountain	Little Rattlesnake Creek	2.8	Unkn							
Battle Mountain	Rattlesnake Creek	3.0	Unkn							
Battle Mountain	Rattlesnake Creek Trib. 27.6	1.7	Unkn							
Rattlesnake	Little Rattlesnake Creek	3.5	Unkn							
Rattlesnake	Rattlesnake Creek	2.4	Unkn							
Antelope Flat	Antelope Creek Trib. 21.5	2.7	Unkn							
Antelope Flat	Little Rattlesnake Creek	0.2	Unkn							
East Battle Mountain	Rattlesnake Creek Trib. 27.6	0.1	Unkn							

Notalloc	**Owyhee River**	**0.2**	**Unkn**

[1] 1998 303(d) list.

Special management areas:
Archeology

[2] *Current allotment management objectives:*
A) Improve the ecological condition of upland vegetative communities
B) Maintain the ecological condition of upland vegetative communities
C) Maintain the integrity of research and study plots
D) Maintain/improve the condition of riparian vegetative communities
E) Maintain/improve deer/antelope winter range (such as browse or grass/forb/shrub composition objectives)
F) Maintain the integrity of enclosures constructed for wildlife benefits
G) Increase availability of livestock forage
H) Reverse the downward trend of upland vegetative communities
I) Maximize availability of fall green-up for winter deer/antelope use
J) Pasture dominated by private land and managed custodial with no specified management objective
K) Grazed reservoir enclosure with no management objective identified
L) Maintain/improve resource conditions or protect facilities through livestock exclusion; not suitable for livestock use
M) Stabilize meadow soils
N) Manage for aspen regeneration and survival

Appendix F

Wildlife Habitat Descriptions and Considerations

Introduction

Chapter 3 describes the DRFC's for land, resource, and social and economic conditions that are expected to be present on public land in 50 to 100 years if the plan management objectives are achieved. Because the DRFC's are descriptions associated with long term BLM management, they provide limited direction for wildlife habitat assessments and prescriptions over the next 20 years. Due to this limitation, Appendix F has been included here to provide more descriptions of habitat characteristics important to wildlife that will be incorporated into activity plans and evaluated in both the short and long term. The following text will help to explain how BLM intends to:

1) Meet the four general wildlife objectives stated in Table 3-1 regarding upland habitats, riparian habitats, special status species, and bighorn sheep.

2) Meet the quality of wildlife habitat that is implied in the S&G's.
3) Provide a direct link to annual RMP progress, adopt appropriate objectives/terms/conditions in BLM activity plans, and prescribe appropriate activity plan monitoring.

This appendix is not intended to be an exhaustive list of criteria but it does address a wide variety of fundamental wildlife habitat issues in forests and rangelands.

Due to economic and social constraints associated with implementation of the PSEORMP/FEIS, it is assumed that some of these desired conditions and mitigations are not going to be fully attained at all times or in all places on the public land. Where they cannot be fully attained, it is assumed that either wildlife concerns have been outweighed by other resource, social, or economic values, or site potential and other environmental factors such as weeds or frequent fire are preventing their attainment at the present time.

F-1: Wildlife Habitat Security and Disturbances

Security is a fundamental component of wildlife habitat health. Disturbance to habitat security (defined herein as unavoidable or unintended harassment to animals resulting from noise and activity) is known to adversely affect wildlife populations and productivity. Levels of big game winter mortality may increase where human activities cause additional physiological stress to animals already coping with intense cold and wet conditions. For species such as birds, annual recruitment of young may be diminished or eliminated altogether when disturbances occur during the nesting or mating season. Consequently, impacts to animal security during the breeding or wintering season that are caused by disturbance need to be avoided or minimized in BLM authorizations. Generally speaking, disturbances during the summer and fall time period have less potential to inflict serious adverse impacts to wildlife than when they occur during wintering or breeding seasons.

As a general rule, the public can expect that land use authorizations which may impact special status species, raptors, and big game will require some form of mitigation to protect habitat security values. Refer to Table 3-3a for a description of the security protection measures that will be applied to any disturbing activity when needed. Special stipulations not shown in Table 3-3a may be applied for unique circumstances unforeseen in this document.

Security threats to wildlife can originate from a wide range of activities which may include, but are certainly not limited to, OHV use, grazing, minerals exploration or development, recreational use, forest management operations, prescribed fire activities, or actions associated with rights of way. Road locations and densities typically play a very significant and interrelated role in protecting or diminishing wildlife security.

Avoidance or mitigation of disturbing activities can usually be accomplished by prescribing adjustments to the timing, location, or duration of authorized actions. In some instances, project denial may be the only appropriate course of action where resource values are high and mitigation or avoidance cannot reasonably be made. The appropriate measures necessary for the protection of wildlife need to consider the nature of proposed actions, the species affected, and the time of year the action is expected to occur. As described in Table 3-3a, exceptions, modifications, and waivers may be applied to proposed actions that affect wildlife.

General wildlife seasons of use for the planning area are as follows:

Winter: Normally begins for most eastern Oregon wildlife by December and ends by early March.

Breeding: Normally begins in early March and extends through the month of June. A few species, such as owls, begin breeding in winter months.

Summer–Fall: Normally begins in July and extends through November.

F-2: Structural Projects

Powerlines should be configured and located according to the best current technical guidance for wildlife mitigation. The intent is to avoid or reduce the potential for instances of electrocution, collision, or avian predation (hunting perches that may affect some species such as sage grouse) or other avoidable adverse impacts. New power-lines should be installed within existing power line corridors whenever possible to limit the number of potential electrocution and collision hazard areas. "Suggested Practices for Raptor Protection on Power Lines" (1996) is one example of several technical references BLM will use to provide protection for raptors.

Fences for livestock grazing administration will be designed to conform to BLM Manual 1737-1 which prescribes wire spacing and types (smooth, barbed, or net types) depending on the wildlife species that occupy a project area. These standards will accommodate most wildlife movements and minimize the risks of injuries or death due to entanglement and collisions. Fence routing needs to mitigate adverse consequences to wildlife especially in migration corridors and big game winter ranges. Proposed fence locations may be adjusted in order to avoid congregation of livestock in important wildlife habitats.

Escape ramps (expanded metal panels) will be installed in all new livestock troughs or installed in concert with scheduled maintenance in order to reduce or eliminate the potential for wildlife entrapment and drowning.

Spring sources developed for the purpose of delivering water into a livestock trough should leave some of the native source flow intact where possible. This will protect endemic molluscs, amphibians, or other wildlife vulnerable to spring dewatering. Exclosure fencing should accompany spring developments to protect wetland vegetation if grazing systems do not allow for the attainment of PFC (see Water Resources and Riparian/Wetland Areas sections of this document). Troughs connected with spring developments should be placed away from riparian and wetland habitats to reduce livestock trampling damage to wet areas. Trough overflow at springs should be controlled with float valves or else delivered back into the native channel.

Water developments such as reservoirs, pipelines, and guzzlers may benefit some species of wildlife such as antelope, chukar partridge, and bighorn sheep by providing new sources of drinking water. Judgment as to whether developed water will be an overall benefit or detriment to wildlife habitat and populations is dependent upon the area of consideration and the species effected. Maintaining habitats free of new water developments accessible to livestock will normally be considered a beneficial wildlife habitat conservation measure in high quality native range (refer also to F-3).

F-3: Grazing Use Considerations for Upland Habitats

Unless specified with rationale, the following factors would be considered consistent with the protection of most wildlife habitat values in activity plans.

Key area selection for monitoring activity plan performance (effectiveness monitoring) is based on habitat type, land-form, and/or fence locations at reasonable distances from water accessible to livestock or wild horses. One or more key species of wildlife and wildlife seasons of use need to be identified for activity plan evaluation purposes.

1) Grazing systems should incorporate periodic yearlong rest and/or growing season deferment.

2) Key grass forage species on native ranges should be grazed at stocking levels that allow for maintenance or improvement of plant vigor and recruitment of young plants.

3) Native range should be grazed in such a way that a patchy appearance comprised of lightly to moderately grazed and ungrazed areas are prevalent throughout most of the pasture. The rangeland may be topped, skimmed, or grazed substantially in patches. In so doing, a combination of seasonally important habitat values important to wildlife will be present including grazed (conditioned) forage plants and areas with high quality cover and structure (ungrazed or slightly grazed vegetation).

Livestock grazing described as a thorough search (heavy trampling, limited standing herbaceous cover, and uniformly grazed key forage plants) is limited to areas near watering facilities such as troughs and reservoirs. Heavy utilization patterns do not dominate the appearance of the landscape and vegetation structure at the end of the growing season. Most young plants are undamaged subsequent to grazing use and low value herbaceous plants are left ungrazed.

4) TNR livestock grazing use in native range should be avoided to protect forage, cover and structure values for wildlife. Where it is permitted for the attainment of other management objectives, TNR grazing use should conform to the general descriptions under Alternative C and be less than or equal to 40 percent as defined in this document.

5) Native upland range that is not grazed by domestic livestock is a desired wildlife habitat condition. It is generally in limited supply and typically provides very high quality structure and native forage for wildlife use. Maintenance of currently ungrazed native range conditions by avoiding new water developments, salting, and fencing is considered a beneficial mitigating measure for the protection of wildlife habitat values.

6) Crested wheatgrass seedings should be grazed periodically in such a way that spring or fall green-up or conditioned forage is available for Canada geese, big game, or other species.

Light use and nonuse by livestock in seedings for long periods of time will diminish green forage values for wildlife because grass plants become rank and unpalatable.

7) Green-up and conditioned forage: Green-up (new vegetative growth initiated by growing season moisture) is valuable to wildlife because it provides succulent, nutritious, and easily digested forage. Nearly all classes of wildlife from songbirds to big game can be observed consuming green-up whenever and wherever it is available throughout the year. Domestic livestock and wild horses also consume green-up for its palatability and nutritional qualities. The value of green-up for wildlife is highest on habitats used during the spring, winter, or fall.

The nutritious character of spring green-up prepares animals for the physiological demands of breeding activity and therefore it can be directly tied to animal population productivity. Where green-up is available on winter ranges it helps animals to maintain their physiological condition and therefore it can be directly tied to population survival. Where green forage has been unavailable for prolonged periods due to drought or normal summer conditions, it helps to restore overall animal health and therefore it can be tied directly to animal population recovery from cyclic or seasonal stress.

Conditioned forage (areas that have been burned or grazed by livestock) also tends to provide green vegetation that is sought out by wildlife. Consequently, grazing and burning can both be of benefit to wildlife by providing a higher volume and greater availability of succulent, nutritious, and easily digested forage. However, conditioned forage on native range from fires and grazing use is not in limited supply. Consequently, the need for more conditioned forage (resulting from livestock use) to benefit wildlife on native range is quite limited. Moreover, the structural characteristics and values of shrubby cover will need to be carefully weighed before emphasizing the desirability of providing more conditioned forage on public land through prescribed fire (see F-5).

8) Quaking aspen (apart from riparian habitats) and mountain shrub species should exhibit healthy growth forms, structure and plant vigor. Uneven-aged stands of aspen and mountain shrubs should be prevalent and grazing systems should include rotations that allow for seed production and seedling establishment. Grazing systems need to allow for the likelihood of maintaining or improving forage, cover, and structural features important to game and nongame species.

F-4: Grazing Use Considerations for Riparian/Wetland Habitats

At a minimum, grazing use needs to be consistent with providing those conditions which are necessary to promote properly functioning riparian/wetland areas.

There is no single management strategy that will meet all riparian needs for wildlife and there is no single tool for measuring activity plan performance that can be applied in every riparian area. This is because riparian site potential and current conditions are highly variable. The appropriate tool for monitoring activity plan performance is determined by the important wildlife resources present. Specific riparian objectives therefore need to be applied at the activity plan level in light of all these variables.

Where vegetative trend is judged to be inadequate for establishing desired wildlife habitat conditions, a desired plant community (DPC) objective will be used to address wildlife habitat management in riparian areas. Appendix D4, Table D4-1, describes the common indicators of riparian trend and how they will generally be interpreted in evaluations.

Where needed, DPC objectives will address one or more of the following habitat elements important to wildlife:
Systems capable of supporting woody and herbaceous species: age composition, structural characteristics (height, volume, etc.), species distribution and abundance of key woody species. Distribution, composition, and abundance of key herbaceous species including grasses, forbs, sedges, and rushes. Reproductive success and grazing utilization of key herbaceous or woody species

Systems with little or no capability to support woody species: distribution, composition, and abundance of key herbaceous species including grasses, forbs, sedges, and rushes. Reproductive success and grazing utilization of key herbaceous species.

F-5: Management of Vegetation Within Steppe Rangelands Occupied by Sage Grouse and Other Species that use Sagebrush Habitats

General Values of Shrubby and Herbaceous Cover for Wildlife

Wildlife diversity and productivity is profoundly influenced by the relative abundance, structure, and spatial arrangement of sagebrush communities (refer to Chapter 2, Wildlife and Wildlife Habitat, Figure 2-1 SEORMP). Management of sagebrush communities that is appropriate to soil, climate, and landform needs to incorporate the following overstory and understory components which contribute towards healthy wildlife habitats:

Shrub overstory: Big sagebrush, low sagebrush, and other shrubby species within the genus *Artemisia* provide primary sources of wildlife habitat structure, food, and cover.

Herbaceous understory: Grasses and forbs provide primary sources of wildlife habitat structure, food and cover. Herbaceous cover also provides indirect food sources for wildlife by supporting the environments that produce insects consumed by birds and other small animals.

Two important tables of habitat information are included in this section that will be used for wildlife habitat evaluation purposes: Table F-1 describes general relationships of wildlife use at various shrub overstory canopy measures; and Table F-2 describes the amount and arrangement of habitat that is desired at mid scales (GMA's) and fine scales (pastures). Used in combination, these two tables will enable BLM to craft a multi-scale monitoring and assessment process that is able to address cumulative effects of management actions and determine whether or not future actions conform to Chapter 3 objectives for wildlife habitat in sagebrush rangelands.

Exceeding the fine scale (pasture level) percents (acreages) of Table F-2 may be necessary in order to compensate for currently fragmented habitats and/or where it is likely that fragmentation will continue due to fire history and frequency. Determining activity plan objectives can only be made after considering existing cover conditions at mid scales and larger, and in light of wildlife survey data. This will be accomplished as a part of the rangeland health assessment process.

Important species of wildlife, in addition to sage grouse, that use big sagebrush habitats are:

Nongame species: sage thrasher, Brewer's sparrow, sage sparrow, black-throated sparrow, gray flycatcher, loggerhead shrike, pygmy rabbit, sagebrush vole.

Game species: mule deer, elk, and pronghorn.

Desired Amounts and Arrangements of Sagebrush Habitats

Structural characteristics and general distribution at mid scales (GMA's): Shrub cover capable of supporting the life history requirements of sage grouse and other wildlife (such as Classes 3, 4, and 5 from Table F-1) that use sagebrush habitats should be present at multiple scales, over a large area, and in a variety of spatial arrangements (such as at a landscape level and with connectivity present). This should include a central core of sagebrush habitat which is present in large contiguous blocks as well as some other habitat arrangements such as islands, corridors, and mosaic patterns. Each of these patterns have significance to wildlife within geographic areas.

Wildlife objectives for sagebrush communities in individual pastures, allotments, and GMA's will be determined on the basis of factors such as: (1) presence of sage grouse and their seasonal life history needs, (2) existing native shrub cover patterns and characteristics within each GMA, (3) the frequency and reasonably foreseeable likelihood of fire, and (4) locations of seedings and their shrub overstory conditions.

Shrub cover should be present that shows some mix of height and age classes but with an overall emphasis on the presence of communities with shrubs in a mature structural status per Thomas et al. (1984).

Big sagebrush shrub cover on native range at fine scales (pastures): Shrub overstories capable of supporting sage grouse and other species that use sagebrush habitats should be present on at least 50 to 75 percent of the surface acreage of livestock management pastures capable of supporting big sagebrush communities. For example: a 1000-acre native-range pasture that is a Wyoming, mountain, or basin sagebrush type should provide shrub cover capable of supporting sage grouse and other species that use sagebrush habitats on at least 500 to 750 acres (such as Classes 3, 4, and 5 from Table F-1).

Big sagebrush shrub cover on seeded range at fine scales (pastures): Shrub overstories capable of supporting sage grouse and other species that use sagebrush habitats should be present on at least 25 to 50 percent of the surface acreage of livestock management pastures capable of supporting a big sagebrush community. For example: a 1000-acre seeded pasture that is a Wyoming, mountain, or basin sagebrush habitat type should provide adequate shrub cover capable of supporting sage grouse and other species that use sagebrush habitats on at least 250 to 500 acres (such as Classes 3, 4, and 5 from Table F-1).

Herbaceous understory on native range at fine scales (pastures): Herbaceous understory composition throughout most native range habitats should exhibit multiple species of native forbs and grasses consistent with site potential at mid, late, or PNC seral stages.

Herbaceous understory on seeded range at fine scales (pastures): Herbaceous cover composition in seedings should support one or more adapted forb species.

Big Sagebrush Cover Class Graphic (Figure F-1)

Figure F-1 is an illustration of a fine scale (pasture in an allotment) landscape supporting a sagebrush community complex. The graphic suggests how sagebrush-steppe rangeland can support canopy cover values in each of the five classes (described in detail in Table F-1) and how they can be spatially distributed. Each Table F-1 class has value and contributes towards meeting the yearlong needs of wildlife in terms of food, cover, and structure. ICBEMP science describes similar relationships and values.

Too much Class 1 and 2 or 4 and 5 habitat within a GMA will result in an imbalance in habitat productivity and connectivity for wildlife. An overabundance of Class 1 and 2 is indicative of undesirable conditions for wildlife due to shrub cover fragmentation. Conversely, an overabundance of Class 4 and 5, especially where there is a depleted understory, is indicative of undesirable conditions for wildlife because of limited herbaceous understory productivity (such as limited food sources for wildlife provided by herbaceous plants and insects).

In a healthy rangeland that supports multiple resource values, sagebrush canopy cover equal to or greater than 15 percent line intercept values may occur in patches (per ICBEMP Final EIS) within a community complex that is predominantly a Class 2 or 3 type. Class 4 or 5 types may also be reasonably interpreted as part of the natural complex site variability found in the sagebrush steppe (Miller and Eddleman 2000). In other words Class 4 or 5 types can be a natural product of soil, climate, and landform, and may often occur as transitional areas among Wyoming, Great Basin, and mountain sage shrub communities. Class 4 or 5 types may also be indicative of poor conditions due to grazing disturbance; these areas often support a depleted understory.

Class 4 or 5 types can be high value habitat features of a well connected, biologically diverse sagebrush landscape that is desirable for native, T&E, and locally important species of wildlife; such as Standard #5 in the S&G's. There are distinct site potential differences in shrub canopy and understory character that need to be incorporated into the management of Wyoming, basin, and mountain sagebrush communities at the fine scale.

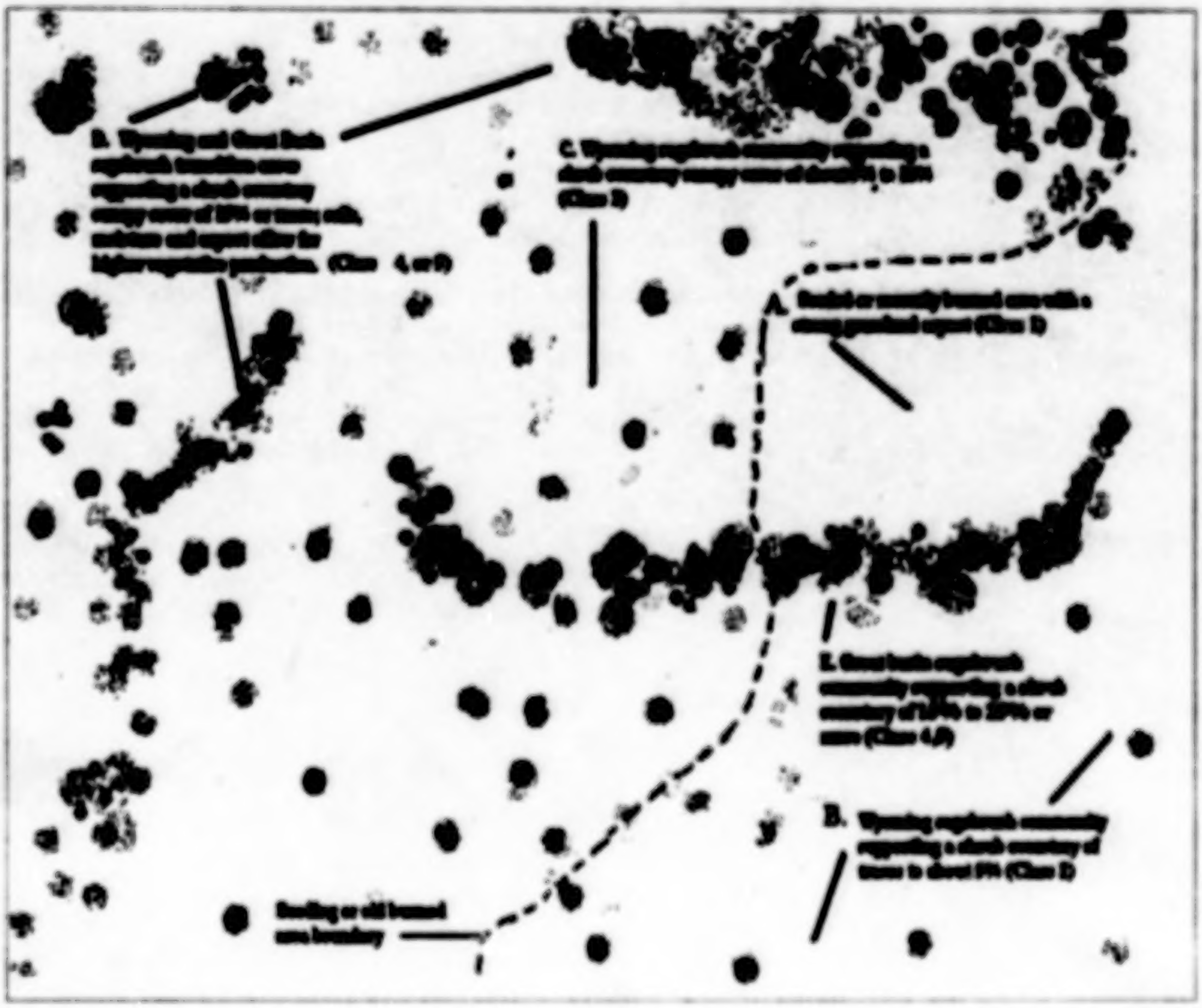

Figure F-1.—Distribution and variation of big sagebrush cover classes

Table F-1.—*General habitat relationships of sagebrush canopy cover (as determined by line intercept) and herbaceous understory composition to wildlife habitat values and use (also see Figure F-1)*

Class 1 No sagebrush canopy cover—

Class 1(A): Plant communities that are dominated by native grasses and forbs which generally provide a portion of habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. These plant communities are typically observed after fire, before sagebrush species recolonize. These plant communities are desirable to achieve in a patchy, mosaic pattern within the sagebrush-steppe, intermingled with Class 2(A, C), Class 3(A, B, C), Class 4(B), and Class 5(B:25% to near 35% canopy cover) plant communities.

Class 1(B): Plant communities that are dominated by introduced annual grasses and forbs such as cheatgrass, medusahead, and tumblemustard, which do not provide habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. These plant communities are not desirable to sustain in their present condition if the sites are capable of supporting a sagebrush plant community(ies). Before converting to annual grasses and annual forbs, these Class 1(B) plant communities were more likely to have been Wyoming big sagebrush or basin big sagebrush plant communities than either low sagebrush or mountain big sagebrush plant communities (Miller and Eddleman 2000). These plant communities are biologically and physically unstable because of high risk for repeated fire. High plant density of these annual plants, combined with great amounts of litter, effectively eliminate biological soil crusts. The combination of these conditions inhibit native plant recovery.

Class 1(C): Plant communities that are dominated by seedings of crested wheatgrass or other exotic perennial grasses which generally do not provide habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. These plant communities are lacking in sagebrush canopy cover either because a sagebrush seed source is lacking, or there has not been sufficient time elapsed for sagebrush species to recolonize the seeding. These plant communities are not desirable to sustain in their present condition if the sites are capable of supporting a sagebrush plant community(ies).

Class 1(D): Plant communities that are closed woodlands dominated by species such as western juniper. Particularly in the mountain big sagebrush and low sagebrush plant communities, western juniper encroachment and increasing density can result in near total loss of sagebrush canopy cover (Miller and Eddleman 2000). These Class 1(D) plant communities do not provide habitat needs for sage grouse (sage grouse did not select western juniper communities in central Oregon for nesting or winter habitat [BLM 1994; Miller and Eddleman 2000]) and other wildlife that use sagebrush-steppe habitats. In many of these plant communities, excessive livestock grazing pressure and/or fire suppression have been the main contributors to their formation. These plant communities have depleted herbaceous understories in addition to depleted shrub canopy cover, and could have depleted biological soil crusts if the sites are capable of supporting biological soil crusts. The depletion of the shrub, herbaceous, and biological soil crust cover can result in accelerated erosion on these sites. These plant communities are not desirable to sustain in their present condition if the sites are capable of supporting a sagebrush plant community(ies) and supported a sagebrush plant community(ies) before the western juniper encroached.

Class 2 Trace to 5%—

Class 2(A): Plant communities that are dominated by native grasses and forbs with some recruitment of sagebrush species, which provide a portion of habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. These plant communities are typically observed after fire, when sagebrush species are recolonizing. These plant communities are desirable to achieve in a patchy, mosaic pattern within the sagebrush-steppe, intermingled with Class 1(A), Class 2(C), Class 3(A, B, C), Class 4 (B), and Class 5(B:25% to near 35% canopy cover) plant communities.

Class 2(B): Plant communities that are dominated by introduced annual grasses and forbs such as cheatgrass, medusahead, and tumblemustard, where sagebrush species are generally declining in abundance attributable to too frequent of fire. These plant communities are typically not providing habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. These plant communities are not desirable to sustain in their present condition if the sites are capable of supporting a sagebrush plant community(ies). These plant communities are biologically and physically unstable because of high risk for repeated fire. High plant density of these annual plants, combined with great amounts of litter, effectively eliminate biological soil crusts. The combination of these conditions inhibit native plant recovery.

Class 2(C): Plant communities that are dominated by seedings of crested wheatgrass or other exotic perennial grasses, where sagebrush species are in the early stages of recolonization. These plant communities might not be providing the complex shrub-grass-forb cover and food needs of sage grouse and other wildlife that use sagebrush-steppe habitat, but if there is active recolonization of sagebrush species, there is high future likelihood for providing habitat needs. These plant communities are desirable to sustain if they are moving successionally to greater abundance of sagebrush species.

Class 2(D): Plant communities that are woodlands dominated by species such as western juniper. Particularly in the mountain big sagebrush and low sagebrush plant communities, western juniper encroachment and increasing density can result in near total loss of sagebrush canopy cover (Miller and Eddleman 2000). These plant communities do not provide habitat needs for sage grouse (sage grouse did not select western juniper communities in central Oregon for nesting or winter habitat [BLM 1994; Miller and Eddleman 2000]) and other wildlife that use sagebrush-steppe habitats. In many of these Class 2(D) plant communities, excessive livestock grazing pressure and/or fire suppression have been the main contributors to their formation. These plant communities have depleted herbaceous understories in addition to depleted shrub canopy cover, and could have depleted biological soil crusts if the sites are capable of supporting biological soil crusts. The depletion of the shrub, herbaceous, and biological soil crust cover can result in accelerated erosion on these sites. These plant communities are not desirable to sustain in their present condition if the sites are capable of supporting a sagebrush plant community(ies) and supported a sagebrush plant community(ies) before the western juniper encroached.

Class 3 Greater than 5%, up to 15%—

Class 3(A): Plant communities supporting low sagebrush or Wyoming big sagebrush, with an understory of native grasses and forbs (typically about 10% grass canopy cover and less than 10% forb canopy cover), and intact biological soil crusts in interplant spaces, represent the potential natural vegetation for these plant communities (Miller and Eddleman 2000). Class 3(A) low sagebrush or Wyoming big sagebrush plant communities provide habitat needs for sage grouse (such as winter habitat [Miller and Eddleman 2000]) and other wildlife that use sagebrush-steppe habitat. They are desirable to sustain in a patchy, mosaic pattern within the sagebrush-steppe, intermingled with Class 1(A), Class 2(A, C), Class 3(B, C), Class 4(B), and Class 5(B:25% to near 35% canopy cover) plant communities.

Class 3(B): Plant communities supporting basin big sagebrush or mountain big sagebrush, with an understory of native grasses and forbs, which are typically moving successionally to greater abundance of sagebrush species and are not yet at the potential natural vegetation for these two plant communities. Despite this, Class 3(B) basin big sagebrush or mountain big sagebrush plant communities provide habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitat. Their presence in a mosaic, intermingled with Class 1(A), Class 2(A, C), Class 3(A, C), Class 4(B), and Class 5(B:25% to near 35% canopy cover) plant communities, should be considered desirable for sagebrush-steppe habitat. It should be recognized however, that these Class 3(B) plant communities are probably transitory and should be permitted to move successionally to Class 4 (see Class 4(B) for more detail).

Class 3(C): Plant communities that are dominated by seedings of crested wheatgrass or other exotic perennial grasses, where sagebrush canopy cover is on the increase attributable to sagebrush colonization. While not providing the quality of habitat that Class 3(A) or Class 3(B) plant communities do, because typically there is not a diverse grass or forb component in these seedings, Class 3(C) plant communities do provide added structure because of the sagebrush, which provides habitat for some wildlife that use sagebrush-steppe habitat.

Class 4 Greater than 15%, up to 25%—

Class 4(A): Plant communities supporting low sagebrush or Wyoming big sagebrush, which typically show a decrease in native grass and forb canopy cover (particularly where sagebrush canopy cover is 20% or greater [Miller and Eddleman 2000]), and biological soil crust development, compared with Class 3(A) low sagebrush or Wyoming big sagebrush plant communities. Disturbances such as excessive livestock grazing pressure are often contributory to development of Class 4(A) plant communities (Miller and Eddleman 2000). Class 4(A) is not the potential natural vegetation, nor a desirable outcome, for these two plant communities when the inherent capabilities of soils, landform, and climate are factored in. However, Class 4(A) plant communities can provide some habitat needs for sage grouse (such as winter habitat [Miller and Eddleman 2000]) and other wildlife that use sagebrush-steppe habitat.

Class 4(B): Plant communities supporting basin big sagebrush or mountain big sagebrush, with an understory of native grasses and forbs, more often than not represent the potential natural vegetation for these plant communities. Class 4(B) plant communities provide habitat needs for sage grouse (such as nesting and brood-rearing habitat [Miller and Eddleman 2000]) and other wildlife that use sagebrush-steppe habitat. Their presence in a mosaic, intermingled with Class 1(A), Class 2(A and C), Class 3(A, B, C), and Class 5(B:25% to near 35% canopy cover) plant communities, should be considered desirable for sagebrush-steppe habitat.

Class 4(C): Plant communities supporting mountain big sagebrush or low sagebrush, with tree seedlings (particularly western juniper) in the understory. Particularly in the mountain big sagebrush and low sagebrush plant communities, western juniper encroachment and increasing density can result in near total loss of sagebrush canopy cover (Miller and Eddleman 2000). These Class 4(C) plant communities currently provide habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. However, with continued growth and increasing density of the western juniper, sagebrush will decline and these plant communities will transition and at some point not provide habitat needs for sage grouse and other wildlife that use sagebrush-steppe habitats. On many of these Class 4(C) plant communities, excessive livestock grazing pressure and/or fire suppression have been the main contributors to their formation. These plant communities are not desirable to sustain in their present condition if the sites are capable of supporting a sagebrush plant community(ies) and supported a sagebrush plant community(ies) before the western juniper encroached.

Class 5 Greater than 25%—

Class 5(A): Plant communities supporting basin big sagebrush or mountain big sagebrush, with an understory of native grasses and forbs, can represent the potential natural vegetation for these plant communities, particularly for canopy cover that ranges from 25% to less than 35% (Miller and Eddleman 2000). However, as sagebrush canopy cover approaches 35%, the understory of native grasses and forbs decreases. Class 5(B) basin big sagebrush or mountain big sagebrush plant communities can provide habitat needs for sage grouse (such as nesting and brood-rearing habitat [Miller and Eddleman 2000]) and other wildlife that use sagebrush-steppe habitat (such as pygmy rabbit). Class 5(B) that has sagebrush canopy cover in the range of 25% to less than 35% is probably within the range of what the soils, landform, and climate would sustain for these two plant communities, whereas canopy cover Class 5(B) that approaches or exceeds 35% in these two plant communities is probably undesirable and a result of excessive livestock grazing pressure and/or fire suppression

Class 5(B): Plant communities supporting low sagebrush or Wyoming big sagebrush, which typically are depauperate in understory native grasses and forbs (Miller and Eddleman 2000) and often have an understory composed of exotic annuals such as cheatgrass and mustards. Understory native grasses, forbs, and biological soil crusts would be primarily restricted to microsites beneath shrub canopies and would rarely be found in interspace microsites. Disturbances such as excessive livestock grazing pressure are often contributory to development of Class 5(A) plant communities (Miller and Eddleman 2000). Although these low sagebrush or Wyoming big sagebrush plant communities can provide some habitat needs for sage grouse (e.g. winter habitat; Miller and Eddleman 2000) and other wildlife that use sagebrush-steppe habitat, these Class 5(A) plant communities are not the potential natural vegetation, nor a desirable outcome, for these two plant communities when the inherent capabilities of soils, landform, and climate are factored in.

F-6: Appropriate Management Actions in Sagebrush Habitats for Meeting Wildlife Habitat Needs

Appropriate management actions (BLM approved mechanical, chemical, biological, or fire-related means) that are consistent with management for wildlife in sagebrush ecosystems include:

1) Restore rangelands that are depleted in structure and plant composition due to past uses, fires, and weed invasions. Restoration with multiple native species is preferable to using introduced species such as crested wheatgrass. However, if native species cannot be established because (1) native seed sources are not available, or (2) intense competition from other undesirable vegetation is very likely to limit the success in establishing natives, then introduced grasses with a shrub component (crested wheatgrass and shrubs) will be considered preferable to taking no rehabilitation action at all. Fire and weed threats to remaining areas of good quality native range need to be reduced or eliminated where possible.

2) Reduce the level of western juniper encroachment into rangeland sites that threaten sage grouse as a result of habitat loss and hunting perches for avian predators. Use mechanical means, rather than fire, where the risk of exacerbating fire cycles associated with invasive species (such as cheatgrass) is high.

3) Modify landscape character in monotypic stands of sagebrush where there is reason to believe that such action would enhance wildlife habitat values and not further exacerbate problems associated with fragmentation.

4) Restore habitat complexity, diversity, and structure in at least portions of rangelands currently dominated by monoculture stands of adapted grasses (nonnative). This action is considered appropriate if the area is judged to be of substantial consequence to the connectivity of individual geographic areas and the outcome would benefit critically important wildlife habitats (such as areas of concentrated or otherwise highly significant wildlife use).

5) Delay the timing of certain crested wheatgrass retreatments (treatments for the purpose of encouraging more grass production) where the status of sage grouse winter use and breeding activity is uncertain. Prescribe treatments based on documented field survey data that address sage grouse absence or presence.

6) Use cultural practices to establish greenstrips in order to diminish the chances for further loss of quality sagebrush habitats to wildfire. This is especially true for quality sage grouse habitats that adjoin fire prone, cheatgrass-dominated areas.

7) Where necessary, bring livestock utilization levels or seasons of use into conformance with herbaceous cover requirements in sage grouse nesting habitats.

F-7: Western Juniper Woodland Management Considerations

Habitats that support western juniper should provide the following kinds of characteristics important to wildlife:

1) Patches of thermal and hiding cover sufficient to meet the habitat requirements of mule deer and elk.

2) Scattered mature trees suitable for nesting raptors such as ferruginous hawks.

3) Limited juniper presence in rangelands where sage grouse forage and cover values are threatened or where predation by raptors may be affecting limited grouse populations.

4) Maintenance of all large trees (approximately 24 inch diameter measured 1 foot above ground) with nesting/hiding cavities used by various species of small mammals and birds.

5) Downed trees for small animal refugia and big game hiding cover.

6) Vegetation mosaics within project sites so that the result of treatments is approximately 50 percent juniper habitat and 50 percent shrub/grassland habitat. The patch size and layout of cover types resulting from projects (burning or cutting) is dependent upon wildlife that use the area and cover conditions within the geographic area being effected

F-8: Forest Management Considerations

Due to the fact that forested habitat in MRA is on the southern edge of the Blue Mountains, it will be desirable to maintain old growth characteristics wherever they are present. Actions which promote the attainment of old growth character in the long term will be considered beneficial for wildlife habitat values.

Green Tree Replacement (GTR), Snags, and Down Woody Debris in Forested Habitats

There are at least 30 bird and 23 mammal species in the Blue Mountains Region that use snags for nesting or shelter. Sixteen bird species are excavators. At least 179 species of vertebrates (5 amphibians, 9 reptiles, 116 birds, and 49 mammals) make some use of decaying logs.

Snag, green tree replacements for snags (GTR) and down woody debris guidelines are needed to protect wildlife populations at the 60 to 70 percent level. Commercial harvest of large trees and existing tree insect infestations have created shortages in snags and green tree replacements. The harvest of dead/dying trees and fire killed trees could exacerbate snag, GTR, and woody debris deficits. Snags, GTR, and woody debris recommendations at the project level will vary depending upon whether existing forest conditions for wildlife are determined to be (1) desirable, (2) undesirable, or (3) burned.

Both hard and soft snags at approximately equal numbers are required to meet the needs of various birds species for nesting and foraging. The desired snag tree species are fir, larch, and ponderosa pine.

Desirable forest conditions: The desired forest condition has all size green trees with snags, down woody debris, less than 12 percent soil compaction and insects endemic rather then epidemic. Any harvest should leave healthy trees of all size classes and approximate species mix for the site. The following table lists number of trees by sizes to be retained for future snags and number of snags by size classes.

Size	Green tree replacement	Snags [1]
10-12	7	1
13-20	20	3
20 +	6	1

[1] More small trees and snags must be retained if large tree numbers are inadequate.

Undesirable forest conditions: GTR and snags may be difficult to maintain at desired levels. Healthy green trees may not be available in all size classes, species mixes, or poorly distributed over the land base. Also, snag distribution, size classes and species mixes may be deficient. The target for snags and GTR is the same as in a healthy forest, but not all green trees saved may be healthy.

Burned forest conditions: As few or no green trees may be available, snags or dead trees must be preserved at a higher level than in a desirable forest condition. Large snags are the habitat element that will be deficient over time as the young forest is reestablished. Four snags/acre over 20 inches dbh should be maintained as snags will begin to fall at approximately 10 years. Eventually this will leave a deficit of large snags. The small snags would be replaced in approximately 40 years as the new forest is regenerated. Large snags will be missing from 10 to 120 years or more.

Western juniper: Care must be taken not to substitute juniper for pine and larch when addressing species such as pileated and black-backed woodpeckers.

Grand fir: Other snag elements to consider are green grand fir trees over 25 inches that have hollow centers. If these trees have a broken top exposing the hollow center, they are even more valuable. Numerous birds and mammals use these broke-top snags for nesting, roosting, and winter hibernation. These trees are not distributed across the landscape, as many have already been cut. Because many wildlife species use these trees, most or all large green-cull fir trees should be saved.

Snag Location and Distribution

Snags should be distributed evenly across the landscape to provide optimum habitat. As snag levels are not evenly distributed, snag numbers should be averaged and monitored on 40-acre patches.

If possible, snags should be located where land relief will give protection from prevailing winds. Snags can be grouped within these protection areas and averaged over a 40-acre parcel. Solitary snags need to be left where they can be retained. Solitary snags are very important as the create the down woody material needed over the landscape, and some birds prefer open land for foraging, especially the flycatchers.

Snags can be created if a surplus of green trees are available. If surplus green trees are not available, it is recommended not to sacrifice green trees as this will lengthen the time period for future snag recruitment.

Down Woody Debris

Current research indicates that 10 logs/acre or 10 tons/acre is a minimum. Down woody debris provides nutrient capital, water economy, soil organic reserves, structural component, and plant and animal habitat.

Treatment of Ant Hills

Ants are a primary predator of many forest insects. Ant hills should be protected from logging, controlled fire, etc.

F-9: Bighorn Sheep Guidelines

Management pertaining to bighorn sheep, domestic sheep, and goats is specified within the BLM "Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitats" (1997). These guidelines, which may be modified by agreement among the parties involved, will be reviewed at least every 5 years by a work group of representatives from the livestock industry, State wildlife agencies, BLM, and native wild sheep organizations.

F-10: Calculation of Big Game Forage Demand

Big game numbers used to set forage demand in this plan were supplied by the State of Oregon, Department of Fish and Wildlife, and are based on State-approved management objectives (MO's) and benchmark levels by seasons of use and grazing allotment.

Adhering to the descriptions of grazing use in F-3 of this section would allow BLM to meet upland wildlife forage needs within the the planning area. Conflicts regarding forage availability for wildlife will be addressed on a case basis within periodic rangeland health evaluations. Evaluations may disclose the need for an allotment-specific wildlife forage allocation where desired conditions described under upland utilization are not being met.

Bighorn sheep forage demand was not calculated in Appendix E. Specific locations of bighorn sheep use at the pasture level throughout the plan area was not possible. Nevertheless, bighorn sheep forage will be considered in the course of evaluations similar to pronghorn, deer, and elk.

Big game forage demand in Appendix E, Allotment Summaries, was established by using the three mathematical calculations described below. These calculations are consistent with the "Three Rivers Resource Management Plan" (1991) in Burns District, and they use locally adapted studies on dietary
overlap cited in Vavra and Sneva (1978).

Mathematical Calculations Used for Determining Wildlife Forage Demand

1) Land ownership differences: The percentage of the grazing allotment administered by BLM was multiplied by the MO/benchmark number to determine the number of big game supported on public land versus other ownerships such as state or private.

2) Body mass differences: The number of big game at MO/benchmark levels supported on BLM lands was then divided by a factor of 5.3 (for deer), 7.0 (for pronghorn), and 2.4 (for elk) to determine the number of each species that would potentially consume forage equal to one AUM, which is defined as 800 pounds of air dry forage. (The figure derived from this calculation is referred to as the unadjusted forage demand because it does not factor the dietary differences between livestock and big game.)
3) Dietary preference differences: The unadjusted forage demand was then multiplied by factors of 0.18 for deer, 0.10 for antelope, and 0.70 for elk to reflect the differences in

forage preferences between livestock and big game (this figure is referred to as the adjusted forage demand). *For example*: The adjusted big game forage demand (sometimes referred to as the competitive AUM's) needed to support 50 mule deer on an allotment with 80 percent public land over a period of 12 months would be 86.4 AUM's [50 deer x 12 months x 18 percent dietary overlap x 80 percent public land].

Appendix H
Recreational Opportunity Spectrum

The Recreation Opportunity spectrum (ROS) provides the conceptual framework for inventory, planning, and management of the recreation resource. The ROS recognizes that people differ in their needs and in the experience they desire. Also, the resource base is not uniform; it varies in its potential for providing recreation experiences. The ROS provides a way to characterize either the capability of a resource to provide an experience or the demand for an experience in terms of the activity opportunity and setting opportunity provided or demanded. Therefore, recreation opportunities can be expressed in terms of three components: the activities, the setting, and the experience. The possible combinations of these three components are arranged along a continuum, or spectrum. The ROS is divided into six classes, with each class defined in terms of its combination of activity, setting, and experience opportunities. The six classes are primitive, semiprimitive nonmotorized, semiprimitive motorized, roaded natural, rural, and urban. As conceived, the spectrum has application to all land, regardless of ownership or jurisdiction. Classes are described below and shown on Maps REC-1A, -1J, and -1M in the Draft SEORMP/EIS.

Primitive

This is essentially an unmodified natural environment of fairly large size. Use of motorized vehicles is prohibited. There is an extremely high probability of experiencing isolation, closeness to nature, and self-reliance on outdoor skills. Activities may include hiking, nature study, fishing, cross-country skiing, and floatboating.

Semiprimitive Nonmotorized

This is a predominantly natural or natural-appearing environment of moderate to large size. Minimum on-site controls and restrictions may be present. Use of motorized vehicles is prohibited. There is a high probability of experiencing isolation, closeness to nature, and self-reliance in outdoor skills. Activities may include camping, hunting, snowshoeing, and floatboating.

Semiprimitive Motorized

This is a predominantly natural or natural-appearing environment of moderate to large size. User interaction is low, but there is evidence of other users. Minimum on-site controls and restrictions may be present. Use of motorized vehicles is permitted. There is a moderate probability of experiencing isolation, closeness to nature, and self-reliance in outdoor skills. Activities may include boating, motor biking, specialized landcraft use, mountain climbing, driving for pleasure, camping, and picnicking.

Roaded Natural

This is a predominantly natural-appearing environment with moderate evidence of humans. Evidence usually harmonizes with the natural environment. Management provides for the use of conventional motorized vehicles. There is an equal probability to experience affiliation with other user groups and for isolation and interaction with the natural environment. Challenge and risk opportunities are not very important, although testing of outdoor skills may be. Opportunities for both motorized and nonmotorized recreation are available. Activities may include bus touring, water skiing, walking, canoeing, sledding, and driving for pleasure.

Rural

This is a substantially modified environment. Resource modifications and utilization practices are to enhance specific recreation activities. Facilities are designed for use by a large number of people. Motorized use and parking opportunities are available. The probability of user interaction is moderate to high, as is the convenience of sites and opportunities. These factors are generally more important than the physical setting. Wildland challenges and testing of outdoor skills are generally unimportant. Activities may include interpretive services, swimming, bicycling, recreation cabin use, and skiing.

Urban

This is a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modernization and urbanization practices are to enhance specific recreation opportunities. Vegetative cover is often exotic and manicured. Large numbers of users can be expected on-site and in nearby areas. Facilities for highly intensified motor-vehicle use and parking are available. The probability of user interaction is high, as is the convenience of sites and opportunities. Experiencing natural environments and uses of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses are common. Activities may include resort lodging, ice skating, team sports participation, tour boat use, and picnicking. See Table 2-23 for the amount of public land in each ROS class in each resource area.

Appendix I

Off-Highway Vehicle Use

Off-Highway Vehicle Terms And Definitions

The following terms are defined as stated in 43 CFR 8340.0-5.

Off-road vehicle (OHV) – any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any nonamphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies. OHV use is subject to operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.

Open area designation – any area where all types of vehicle use are permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.

Closed area designation – an area where OHV use is prohibited. Use of OHV's in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

Limited area designation – an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following categories: number of vehicles, types of vehicles, time or season of vehicle use, permitted or licensed use only, use on existing roads and trails, use on designated roads and trails, and other restrictions.

For clarification of terms (as applied in this SEORMP) for types of motorized vehicle travel within certain areas, the following definitions and conditions apply. The described public lands for these designations are depicted on Maps OHV-1, -2, -3, -4, and -5 in the Draft SEORMP/EIS and Map OHV-PRMP.

Seasonal motorized vehicle use limitation – to meet management objectives on certain described public land areas, motorized vehicle travel is limited to certain and/or all designated and/or existing motorized vehicle routes during a certain period of the year. Seasonal restrictions can apply within areas designated as OHV limited and OHV open.

Limited to designated routes – a described area of public land with an OHV limited designation where motorize vehicle travel is restricted to specific roads (and motorized ways in WSA's). Any specific motorized route within the described area not documented as a designated route is closed to motorize vehicle travel, and may be reclaimed if determined needed to meet management objectives. Designated routes are documented in the Vale BLM District Office.

Limited to existing routes – a defined public land area with an OHV limited designation where motorized vehicle travel is restricted to those approved roads in existence at the time of SEORMP ROD. Establishment of any additional (new or extension of existing) motorized vehicle routes requires prior BLM approval. Unapproved routes are subject to closure and reclamation.

Federal Register Notices Relating to Existing OHV Designations

The following are the current *Federal Register* (FR) notices relating to OHV designations within the planning area.

FR Vol. 45, No. 198, October 9, 1980, Vale District, Oregon Designation of Public Lands For Off-Road Vehicle Use.

FR Vol. 49, No. 192, October 1, 1984, Motorized Vehicles on Public Lands, Restrictions of Use, Vale District.

FR Vol. 54, No. 168, August 31, 1989, Off-Road Vehicle Designations, Vale District.

FR Vol. 58, No. 178, September 16, 1993, Limitations of Off-highway Vehicle Use to Existing Roads and Trails, Vale District.

Appendix J

Visual Resource Management Class Objectives

FLPMA requires the BLM to consider the effects of management actions on the visual quality of the landscape. To protect visual resources, all public land is inventoried to determine its visual resource management (VRM) classification. The VRM objectives for each of four possible classifications are described below.

Class I—The objective of this classification is to preserve the existing character of the landscape. This class provides for natural ecological changes, and it allows limited management activity. The level of change should be very low and must not attract attention. Class I is assigned to those areas where a management decision has been made to preserve a natural landscape. This includes areas such as wilderness, the wild sections of NWSR's, and other congressionally and administratively designated areas.

Class II—The objective of this classification is to retain the existing character of the landscape. The level of change to landscape characteristics should be low. Management activities may be seen but should not attract the attention of a casual observer. Any changes must conform to the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. This class represents the minimum level of VRM for WSA's.

Class III—The objective of Class III is to partially retain the existing character of the landscape. Moderate levels of change are acceptable. Management activities may attract attention but should not dominate the view of a casual observer. Changes should conform to the basic elements of the predominant natural features of the characteristic landscape.

Class IV—The objective of Class IV is to provide for management activities that require major modification of the landscape. These management activities may dominate the view and become the focus of viewer attention. However, every effort should be made to minimize the impact of these projects by carefully locating activities, minimizing disturbance, and designing the projects to conform to the characteristic landscape.

Appendix K

Employment Statistics

Table K-1.—*Employment statistics for Malheur County and Statewide*

	1970	1980	1990	1995	1996	1997	1998
Oregon							
Civilian labor force	864,500	1,295,000	1,491,000	1,652,700	1,719,700	1,727,600	1,762,200
Unemployment	61,700	107,000	82,000	80,100	101,600	100,600	98,500
Total wage and salary employment	709,200	1,044,600	1,251,900	1,418,400	1,474,600	1,526,400	1,556,600
Total manufacturing	172,300	215,100	220,300	229,300	235,800	243,600	244,700
Lumber, wood, and paper products	76,200	79,900	73,200	61,300	59,800	60,200	58,500
Other manufacturing	96,100	135,200	147,100	168,000	176,000	183,400	186,200
Total nonmanufacturing	536,900	829,500	1,031,600	1,189,100	1,238,900	1,282,800	1,311,900
Construction and mining	30,800	48,800	54,000	70,400	79,400	83,300	84,300
Transportation, communications, and utilities	48,700	60,500	64,500	71,300	73,500	74,900	76,400
Trade	162,000	255,600	313,100	357,000	365,900	377,500	383,900
Finance, insurance, and real estate	36,000	70,000	80,300	87,200	91,000	94,800	95,200
Services and miscellaneous	112,700	191,400	296,200	362,900	382,600	402,800	416,800
Government	146,700	203,200	223,500	240,200	246,600	249,500	255,400
Malheur County							
Civilian labor force	N/A	11,860	13,590	14,330	14,670	14,450	14,590
Unemployment	N/A	970	720	940	1,270	1,250	1,260
Total wage and salary employment	N/A	9,230	9,650	11,340	11,490	11,770	11,750
Total manufacturing	N/A	1,610	1,540	1,420	1,360	1,410	1,440
Lumber and wood products	N/A	50	N/A	N/A	N/A	N/A	N/A
Other manufacturing	N/A	1,560	1,540	1,420	1,360	1,410	1,440
Total nonmanufacturing	N/A	7,620	8,110	9,920	10,120	10,370	10,310
Construction and mining	N/A	360	260	460	410	380	380
Transportation, communications, and utilities	N/A	500	490	630	650	570	440
Trade	N/A	2,960	3,090	3,570	3,650	3,630	3,460
Finance, insurance, and real estate	N/A	390	340	370	380	380	400
Services and miscellaneous	N/A	1,430	1,720	2,220	2,310	2,410	2,410
Government	N/A	1,980	2,220	2,680	2,730	3,000	3,220

Appendix L

Land Tenure Adjustment Criteria and Legal Requirements

Maps LAND-2J and -2M depict three zones that identify the public land for potential land tenure adjustments (such as acquisition or disposal), consistent with existing regulations and BLM policy. Section 102(a)(1) of FLPMA provides that ". . . the public lands be retained in Federal ownership unless as a result of the land use planning procedure provided for in this Act, it is determined that disposal of a particular parcel will serve the national interest . . ."

Management guidelines specific to each zone are described below.

Zone 1: Retention/Acquisition

Zone 1 land has been generally identified for retention in public ownership. These are also areas where emphasis will be placed on acquisition of land containing high resource values through such methods as exchange, purchase, donation or public agency jurisdictional transfers. Zone 1 land may contain significant visual, wildlife, watershed, vegetative, cultural and other resource values and are generally well blocked. Land within Zone 1 with public resource values may be exchanged for other Zone 1 land with high resource values (see glossary for definitions of high resource values and public resource values).

The following management criteria would be applied to land tenure adjustments involving Zone 1 land within the planning area:

- Land within SMA's such as NW1/4SR boundaries, wilderness areas, WSA's, ACEC's, outstanding natural areas (ONA's), and research natural areas (RNA's) would be retained in public ownership. Private land within these designated areas represents potential acquisition priorities.
- Land Sale exception in Zone 1 - Small parcels of public land adjacent to private land holdings in a Retention-Zone 1 area which are difficult or uneconomical to manage may be considered for exchange or sale under disposal-Zone 3 criteria. Also, parcels of land identified by State, local, or other Federal entities for public purpose or community needs may be considered for exchange or sale under disposal Zone 3 criteria.

Zone 2: Land Exchange

Zone 2 land has been identified for limited retention and consolidation of ownership. Public land within this zone may be exchanged for Zone 1 or 2 non-Federal land with high resource values. Zone 2 public land generally has fragmented landownership patterns or relatively lower resource values than are present in Zone 1. These are areas where emphasis will be placed on acquisition of land containing high resource values through such methods as exchange, purchase, donation or public agency jurisdictional transfers and disposal by exchange to create consolidated public land areas. Zone 2 land will not be sold except as stated under management criteria listed below.

The following management criteria would be applied to land tenure adjustments involving Zone 2 land within the planning area:

- Land within SMA's such as NW1/4SR boundaries, wilderness areas, WSA's, ACEC's, ONA's, and RNA's would be retained in public ownership. Private land within these designated areas represents potential acquisition priorities.
- Land sale exception in Zone 2 - Small parcels of public land adjacent to private land holdings in a Land exchange-Zone 2 area which are difficult or uneconomical to manage may be considered for sale under disposal-Zone 3 criteria.
- Public purpose land sale exception in Zone 2 - parcels of public land may be sold to meet public and community needs.

Zone 3: Disposal

Zone 3 land generally has low or unknown resource values. This land is potentially suitable for disposal by such methods as public agency jurisdictional transfers, or state indemnity selection (state in lieu selection), or "Recreation and Public Purpose Act" (R&PP) lease or patent, exchange or sale unless significant recreation, wildlife, watershed, Special Status species, cultural resources or other significant resource values are identified as a result of site-specific analysis. This zone may include land needed for community expansion, small parcels located adjacent to private inholdings within and/or adjacent to large blocks of public land being retained by BLM, parcels on which unauthorized use exists, and land included within survey hiatus. Zone 3 land may be exchanged for land with greater resource values in Zones 1 and 2. A legal description of Zone 3 is presented in Table L-4.

The following management criteria would be applied to land tenure adjustments involving Zone 3 land within the planning area:

- If acquisition interest is shown, in writing, for Zone 3 land by local, county or state governments, BLM would consider their needs to accommodate community expansion or other public purposes.
- If Zone 3 parcels are found unsuitable for disposal they will be retained and included under the Zone 1 or 2 designation.

General Management Criteria

Land Exchanges

Land exchange is the preferred method for consolidating land ownership. The following general management criteria would be applied when considering land exchanges within the planning area. To be considered to be in the public interest, exchanges must:

- facilitate access to public land and resources, or
- maintain or enhance important public values and uses, or
- maintain or enhance local social and economic conditions; and
- facilitate implementation of other goals and objectives of the RMP.

It is important to minimize the impact to the local tax base by emphasizing exchanges rather than direct purchases.

Direct Purchases

Direct purchases of non-Federal lands may occur when the same public interest general management criteria apply as described under Land Exchanges above.

Disposal of Land by Sale

Public land or tracts to be sold must meet at least one of the following disposal criteria stated in section 203 of FLPMA:

- "Such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another federal department or agency; or
- Such tract was acquired for a specific purpose and the tract is no longer required for that or any other federal purpose; or
- Disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in federal ownership."

Generally, exchanges are the preferred method of disposal but sales will be utilized when:

- It is required by national policy; or
- It is required to achieve disposal objectives on a timely basis, and where disposal through exchange would cause unacceptable delays; or
- Disposal through exchange is not feasible.

The preferred method of selling public land will be by competitive bidding at public auction to qualifying purchasers. However, modified competitive bidding procedures may be used when there is no legal public access to a tract, when necessary to avoid jeopardizing an existing use on adjacent land, or to avoid dislocation of existing public land users.

Public land may be sold by direct sale at fair market value when:

- such land is needed by state or local governments; or
- direct sale is needed to protect equities arising from authorized use; or
- direct sale is needed to protect equities resulting from inadvertent unauthorized use that was caused by survey errors or title defects; or
- there is only one adjacent landowner.

Methods of Disposal

Methods of disposal for implementing land disposal actions include the following: (a) BLM and other Federal jurisdictional transfers; (b) transfers to state and local agencies (such as R&PP patents, in-lieu selections, airport patents); (c) State exchanges; (d) private exchanges; (e) sales; (f) Indian allotments; and (g) desert land entries.

Public Parcels Within Privately-Owned Land

Scattered parcels of public land located within consolidated private areas could be exchanged or sold. Land exchanges would be the preferred method of disposal because this would maintain the current public and private land bases. Parcels of public land may be exchanged for land with greater resource values within BLM retention areas.

Subsurface Mineral Interests

Section 209(b) of FLPMA allows for the disposal of public mineral estate to the surface owners. Section 205 allows for the acquisition of land on interests consistent with the mission of the department.

Appropriate Environmental Review

Site-specific environmental analysis and documentation in conformance with NE1/4PA, including completion of categorical exclusion check lists and plan conformance determinations where appropriate, will be accomplished for each proposed land program action. Interdisciplinary impact analysis will be tiered within the framework of this and other applicable environmental documents.

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Table L-1.—*Rights-of-way corridors (existing and proposed)* [1]

Corridor	Currently occupied (yes - no)	Single use		Multiple use	Designated corridor width (ft)[2]				Corridors with possible development limitations [3]			VRM I & II	Miles of corridor on public land[4]	Resource area
		UT	TR	(UT & TR)	500	1,000	1,500	6,000	WSA	ACEC	NWSR			
Existing														
Star Valley	Y		X		X				X			X	50	JRA
US Hwy 95	Y			X		X			X				79	JRA
Fields/McDermitt-Harney Elec Substa	Y	X				X			X	X		X	35	JRA
Whitehorse/Fields/Denio Jct US Hwy 95	Y		X	X						X		X	22	JRA
US Hwy 95/Soldier Creek	Y		X	X									11	JRA
Soldier Creek/Three Forks	Y	X		X					X	X	X	X	22	JRA
Whitehorse Butte/Three Forks	Y	X		X								X	10	JRA
State Hwy 78	Y		X		X				X			X	25	JRA
Cow Lakes/US Hwy 95	Y		X	X									11	JRA
Folly Farms (Or Hwy 78)/Crowley	Y		X	X									0	JRA/MRA
PP&L 500-kV Intertie North Route	N	X				X			X	X	X	X	51	MRA
US Hwy 20 (Juntura/Harper)	Y		X		X				X			X	9	MRA
Venator/Riverside	Y		X	X							X		5	MRA
Interstate Hwy 84 corridor area	Y		X				X		X				3	MRA
Existing to be deleted														
BPA/Arctic Gas Pipeline Tran Rt	N	X				X[5]	(Deleted from alternatives A, C, D, E)						70	JRA
Proposed PP&L 500-kV Trans L	N	X				X	(Deleted from alternatives A, C, D, E)						60	JRA
BPA/Arctic Gas Pipeline Tran Rt	N	X				X[5]	(Deleted from alternatives A, C, D, E)						53	MRA
MFP alter 500-kV route	N	X				X	(Deleted from alternatives A, C, D, E)						22	MRA
Proposed/additions														
McDermitt Creek Road	Y		X	X									38	JRA
McDermitt Creek Harney El	Y		X		X							X	10	JRA
OR/ID State Line	Y		X	X									7	JRA
Cow Creek	Y		X	X									8	JRA
Harper (US Hwy 20)/Crowley	Y		X	X				X					39	MRA
Proposed 500-kV Route-Dog Leg	N	X				X							17	MRA

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Corridor	Currently occupied (yes - no)	Single use UT	Single use TR	Multiple use (UT & TR)	Designated corridor width (ft)[2] 500	1,000	1,500	6,000	Corridors with possible development limitations [3] WSA	ACEC	NWSR	VRM I & II	Miles of corridor on public land[4]	Resource area
US Hwy 26	Y		X		X								0	MRA
Juntura (US Hwy 20)/Riverside	Y		X	X							X		13	MRA
US Hwy 20 Juntura/Harney Co L	Y		X		X						X		4	MRA
US Hwy 20 Harper/Vale	Y		X		X								3	MRA

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[1] Definitions: Single use utility (UT) and transportation (TR) corridors will allow a single type of lineal right-of-way to be located within a single corridor route. The type of lineal rights-of-way that would be permitted would be the same as listed in the multiuse utility and transportation corridor definition listed below, except it would be limited to a single use instead of a combination of several different types of rights-of-way. More than one right-of-way of the same type would be permitted. These corridors are generally for cross-country power transmission/interties lines, pipelines or county, State, or Federal roads and are already in operation and exist on the ground. However, when other right-of-way needs are identified and should be located in the single use utility corridor, the single use utility corridor could be changed to a multiuse utility corridor at management's discretion in the future without further plan amendment. Multiuse utility and transportation (UT & TR) corridors will allow many different types of lineal rights-of-way to be located within a single corridor route. The types of lineal rights-of-way that will be permitted to coexist in the corridor include, but are not limited to, railroads, highways or roads, power transmission and/or distribution lines, pipelines (natural gas, crude oil, product, coal slurry, or water) and telephone (buried and/or overhead), etc. These corridors are generally already in operation. Limitations may be imposed if the right-of-way use would cause extensive damage to cultural and/or historical resources, or cause a high impact on visual or environmental aspects of the corridor route. Each right-of-way will be evaluated on its own merits on a case-by-case basis.

[2] Source: the 1993 "Western Regional Corridor Study" (WRCS) was used for guidance to determine the designated corridor widths.

[3] Where the corridor forms the boundary of an SMA, the corridor will be outside the SMA. Refer to appropriate sections of this plan for possible development limitations.

[4] Mileages shown are entire routes within planning area only (numbers are rounded). Mileages outside planning area are subject to review by adjacent BLM districts. Designated corridor widths are not reflected in miles of corridor.

[5] The MFP proposed BPA/Arctic Gas pipeline transportation route corridor width is 0.5-mile (2,640 feet).

Table L-2.—*Existing and potential communication sites on public land in the planning area*

	Current use[1]		Site Status		Develop site plans[1]			
Communication site	**Single user site**	**Multi-user site**	**Existing**	**Potential**	**Existing**	**Planned**	**Unplanned**	**Area**
Blue Mountain		X	X		X			JRA
Pharmacy Hill		X[2]	X			X		JRA
High Peak	X		X			X		JRA
Rome	X		X				X	JRA
FAA Vortac Withdrawal and NOAA Site[3]		X	X				X	JRA
Tankey Pasture	X		X				X	JRA
Red Mountain				X			X	JRA
Basque Station				X			X	JRA
Rattlesnake Weather Monitoring Station	X		X				X	JRA
Grassy Butte Weather Monitoring Station	X		X				X	JRA
Rhinehart Butte		X	X		X			MRA
Dry Peak (Cottonwood Mountain)		X[2]	X		X			MRA
Monunnent Peak		X[2]	X		X			MRA
Owyhee Ridge Complex		X	X			X		MRA
Sheaville (building not occupied)			X				X	MRA
Black Butte		X[2]		X		X		MRA
Castle Rock				X			X	MRA
Kelsey Butte Weather Monitoring Station	X		X				X	MRA
Owyhee Ridge Weather Monitoring Station	X		X				X	MRA
Red Butte Weather Monitoring Station	X		X				X	MRA
Vines Hill Weather Monitoring Station	X		X				X	MRA
Tub Mountain				X			X	MRA
Ironside Mountain				X			X	MRA
Juniper Mountain				X			X	MRA
Rock Creek Butte				X			X	MRA

Communication site	Current use [1]		Site Status		Develop site plans [1]			
	Single user site	Multi-user site	Existing	Potential	Existing	Planned	Unplanned	Area
Brown Butte				X			X	MRA
Coyne Point		X	X			X		MRA

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[1] If user demand at a single user site moves the site to a multiuser site category or a potential site becomes a single or multi-user site through user demand, BLM reserves the right to develop a site plan for a particular site as user demand increases over the life span of the land use plan.

[2] A site where BLM and private property lines divide a portion of the site. Development may be occurring on either BLM or private land or both on the same site.

[3] NOAA site communication site right-of-way is issued, granted, and administered by BLM with FAA concurrence. FAA has site jurisdiction.

Table L-3.— *Existing withdrawals on public land within the planning area*

Resource area	Withdrawal agency[1]	Type of withdrawal	Withdrawal order and date	Mineral segregation	Total acres[2]
Malheur	BLM	Public Water Reserve 70	E.O. 3-8-1920	Non-Metal	40
Malheur	BLM	Public Water Reserve 61	E.O. 2-25-1919	Non-Metal	161
Malheur	BLM	Public Water Reserve 81	E.O. 11-26-1921	Non-Metal	237
Malheur	BLM	Public Water Reserve 83	E.O. 4-15-1922	Non-Metal	80
Malheur	BLM	Public Water Reserve 84	E.O. 6-7-1922	Non-Metal	40
Malheur	BLM	Public Water Reserve 87	E.O. 11-9-1923	Non-Metal	160
Malheur	BLM	Public Water Reserve 91	E.O. 6-13-1925	Non-Metal	560
Malheur	BLM	Public Water Reserve 94	E.O. 9-25-1925	Non-Metal	160
Malheur	BLM	Public Water Reserve 107	S.O. Intpr. 196 4-16-1912	Non-Metal	40
Malheur	BLM	Public Water Reserve 107	S.O. Entpr. 160 4.-17-1926	Non-Metal	120
Malheur	BLM	Public Water Reserve 107	S.O. Intpr. 221 4-17-1926	Non-Metal	160
Malheur	BLM	Public Water Reserve 118	E.O. 2-31-1929	Non-Metal	280
Malheur	BLM	Reservoir Site Reserve 2 Beulah/Bully Creek[3]	E.O. 3-31-1911	Non-Metal	1,081
Malheur	BLM/BOR[4]	Reservoir Site Reserve 2 Warm Springs[3]	E.O. 3-31-1911	Non-Metal	930
Malheur	BOR	Owyhee Project Malheur River[3]	S.O. 9-2-1914	Mining	2
Malheur	BOR	Owyhee Project Malheur River[3]	S.O. 11-4-1914	Mining	22
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 3-17-1916	Mining	200
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 11-5-1919	Mining	367
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 2-5-1923	Mining	6,764
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 3-28-1925	Mining	24,332
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 4-16-1936	Mining	160
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 2-18-1937	Mining	80
Malheur	BOR	Owyhee Project Owyhee River[3]	S.O. 4-30-1945	Mining	40
Malheur	BOR	Vale Project–Vale[3]	S.O. 12-14-1926	Mining	2,918
Malheur	BOR	Vale Project–Vale[3]	S.O. 3-18-1929	Mining	511
Malheur	BOR	Vale Project–Vale[3]	S.O. 2-9-1932	Mining	80
Malheur	BOR	Vale Project–Vale[3]	S.O. 5-2-1933	Mining	160
Malheur	BOR	Vale Project–Vale[3]	S.O. 1-4-1943	Mining	110
Malheur	BOR	Vale Project–Vale[3]	PLO 2661 4-23-1962	Mining	240
Malheur	BOR	Reservoir Site 2 Payette/Boise[3]	S.O. 5-17-1905	Mining	0.02
Malheur	BLM/FERC[5]	Power Site Reserve 3	E.O. 7-2-1910		4,863
Malheur	BLM/FERC[5]	Power Site Reserve 3	E.O. 2-15-1916[6]		2,600
Malheur	BLM/FERC[5]	Power Site Reserve 3	E.O. 7-27-1918[6]		2,633
Malheur	BLM/FERC[5]	Power Site Reserve 3	E.O. 8-29-1919[6]		10,706
Malheur	BLM/FERC[5]	Power Site Reserve 175	E.O. 2-28-1911		464
Malheur	BLM/FERC[5]	Power Site Reserve 260	E.O. 4-16-1912		987
Malheur	FERC	Power Project 1971	FPC O 11-30-1951	Mining	987
Malheur	BLM	Power Site Classification	USGS O 11-30-1951		461
Malheur	USFWS	Deer Flat National Wildlife Refuge	PLO 3168 7-31-1963	Mining	4
Malheur	USFWS	Deer Flat National Wildlife Refuge	PLO 4366 2-12-1968	Mining	1
Malheur		Dear Flat National Wildlife Refuge	Unsurveyed Islands	Mining	60
Jordan	BLM	Administrative Site and Airport and Surface Zone Protection McDermitt	PLO 5980 9-2-1981 (OR-23735)	Surface entry and Mining	314
Jordan	BLM	Administrative Site and Airport Surface Zone Protection Burns Jct.	PLO 6624 9-25-1986 (OR-36355)	Surface entry and Mining	1,063
Jordan	BLM	Public Water Reserve 61	E.O. 2-25-1919	Non-Metal	240
Jordan	BLM	Public Water Reserve 64	S.O. Intpr. 7 6-5-1919	Non-Metal	200
Jordan	BLM	Public Water Reserve 86	E.O. 2-18-1923	Non-Metal	800
Jordan	BLM	Public Water Reserve 87	E.O. 11-9-1923	Non-Metal	877
Jordan	BLM	Public Water Reserve 91	E.O. 6-13-1925	Non-Metal	366
Jordan	BLM	Public Water Reserve 107	S.O. Intpr. 140 4-17-1926	Non-Metal	1,358
Jordan	BLM	Public Water Reserve 107	S.O. Intpr. 177 4-17-1926	Non-Metal	720
Jordan	BLM	Public Water Reserve 107	S.O. Intpr. 199 4-17-1926	Non-Metal	80
Jordan	BLM	Public Water Reserve 148	E.O. 6019 2-7-1933	Non-Metal	480
Jordan	BLM	Public Water Reserve 150	E.O. 2-20-1933	Non-Metal	40
Jordan	BLM	Public Water Reserve 64	E.O. 6-5-1919	Non-Metal	74

Resource area	Withdrawal agency [1]	Type of withdrawal	Withdrawal order and date	Mineral segregation	Total acres [2]
Jordan	BLM	Main, West Little, North Owyhee NW1/4SR's	PL 98-494-1984 and OR Omnibus NW1/4SRA of 1988	Mining	59,520 [7]
Jordan	BLM	"Steens Mountain Cooperative Management and Protection Act of 2000"	CAB H.R.-4828, 10-30-2000	See footnote [8]	100,352
Jordan	BLM/FERC [5]	Power Site Reserve 3	E.O. 7-2-1910		13,519
Jordan	BLM/FERC [5]	Power Site Reserve 3	E.O. 7-27-1918 [6]		14,202
Jordan	BLM/FERC [5]	Power Site Reserve 399	S.O. Intrp. 28 7-27-1918		1,275
Jordan	BLM/FERC [5]	Power Site Reserve 399	E.O. 7-27-1918		961
Jordan	BIA	Indian Grazing Reserve	Act of Congress 1-17-1936		17,029
Jordan	BIA	Indian Grazing Reserve Proposed Wilderness	OR-2773 11-23-1967		400
Jordan	BIA	Indian Grazing Reserve Temporary Wilderness in Aid of Legislation	S.O. 7-7-1933		400
Jordan	FAA	VORTAC	PLO 3451 ANS 9-23-1964	Mining	52
Jordan	FAA	VORTAC	PLO 2970 ANS 3-18-63	Mining	15
Jordan	FAA	VORTAC	ANS S.O. 8-14-1948	Mining	60

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[1] Abbreviations: BLM = Bureau of Land Management; FERC = Federal Energy Regulatory Commission; BIA = Bureau of Indian Affairs; FAA = Federal Aviation Administration; BOR = Bureau of Reclamation; USGS = U.S. Geological Survey; USFWS = U.S. Fish and Wildlife Service.

[2] Acreage figures for MRA and JRA are from 1981 MFP documents and may not reflect current acreage figures.

[3] Where BLM withdrawals (Reservoir Site Reserve 2) overlap BOR withdrawals, BOR has jurisdiction, but it's still a BLM withdrawal.

[4] BOR has undivided half interest in Reservoir R/W TD-025873.

[5] These withdrawals are managed in accordance to the July 20, 1966 national MOU between the BLM and FERC.

[6] These withdrawals are actually the modification dates (survey interpretations), and original withdrawals were dated 7-2-1910.

[7] Acreage determined from "Main, West Little, and North Fork Owyhee National Wild and Scenic Rivers Management Plan" (Sept. 1993: Overview, p. 2)

[8] "Steens Mountain Cooperative Management and Protection Act of 2000"—withdrawn from location, entry, patent under mining laws and operation of mineral leasing, geothermal leasing, and minerals material laws. However, the BLM may permit the development of saleable minerals from existing sources for road maintenance only (section 201 of the Act).

Table L-4.—*Land potentially suitable for disposal (Zone 3)*

Tract	Legal description	Acres
Malheur Resource Area		
	T. 13 S., R. 38 E.,	
SM0242	sec. 34, NE1/4SE1/4	40.00
SM0242	sec. 35, SW1/4NW1/4	40.00
SM0242	sec. 35, NW1/4SW1/4	40.00
	T. 13 S., R. 39 E.,	
SM0243	sec. 31, NW1/4NE1/4	40.00
SM0244	sec. 33, SE1/4NW1/4	40.00
SM0244	sec. 33, E1/2SW1/4	80.00
SM0244	sec. 33, S1/2SE1/4	80.00
	T. 13 S., R. 40 E.,	
SM0250	sec. 14, NE1/4NW1/4	40.00
SM0251	sec. 14, SW1/4SW1/4	40.00
SM0252	sec. 22, NW1/4NE1/4	40.00
SM0253	sec. 23, NW1/4NE1/4	40.00
SM0253	sec. 23, E1/2W1/2	160.00
SM0261	sec. 24, SE1/4NE1/4	40.00
SM0254	sec. 25, lot 4	29.80
SM0253	sec. 26, E1/2NW1/4	80.00
	T. 13 S., R. 41 E.,	
SM0255	sec. 17, NE1/4	160.00
SM0255	sec. 17, NW1/4SE1/4	40.00
SM0256	sec. 18, lot 2	39.87
SM0258	sec. 19, E1/2SE1/4	80.00
SM0257	sec. 19, lot 2	39.80
SM0257	sec. 19, E1/2NW1/4	80.00
SM0259	sec. 20, SW1/4NE1/4	40.00
SM0258	sec. 20, W1/2SW1/4	80.00
SM0260	sec. 28, NW1/4SW1/4	40.00
SM0258	sec. 29, N1/2NW1/4	
	except MS-759 patent	55.00
SM0258	sec. 29, SW1/4NW1/4	
	except MS-759 patent	6.00
SM0258	sec. 29, NW1/4SW1/4	
	except MS-759 patent	25.00
SM0258	sec. 29, SW1/4SW1/4	
	except MS-32 patent	37.00
SM0258	sec. 30, E1/2	
	except MS-759 patent	317.00
SM0258	sec. 30, E1/2 SW1/4	80.00
SM0262[1]	sec. 31, NE1/4	160.00
SM0033	sec. 31, S1/2SW1/4SE1/4SE1/4	5.00
SM0262[1]	sec. 31, E1/2 NW1/4	80.00
SM0262[1]	sec. 31, N1/2SE1/4	80.00
SM0262[1]	sec. 31, SE1/4SE1/4	40.00
SM0262[1]	sec. 32, lot 1	13.00
SM0262[1]	sec. 32, lot 2	17.62
SM0262[1]	sec. 32, lot 3	25.35
SM0262[1]	sec. 32, lot 4	7.33
SM0262[1]	sec. 32, lot 5	12.59
SM0262[1]	sec. 32, lot 6	21.78
SM0262[1]	sec. 32, lot 7	9.61
SM0263	sec. 33, SE1/4SW1/4	40.00
	T. 13 S., R. 42 E.,	
SM0264	sec. 33, NE1/4NE1/4	40.00
	T. 14 S., R. 38 E.,	
SM0245	sec. 3, lot 4	39.74
SM0245	sec. 3, SW1/4NW1/4	40.00
SM0246	sec. 9, NE1/4SW1/4	40.00
SM0247	sec. 10, NW1/4SW1/4	40.00
SM0248	sec. 13, W1/2SW1/4	80.00
SM0248	sec. 13, SE1/4SW1/4	40.00
SM0248	sec. 13, SW1/4SE1/4	40.00
SM0248	sec. 14, S1/2NE1/4	80.00
SM0248	sec. 14, E1/2SE1/4	80.00
SM0248	sec. 23, NE1/4NE1/4	40.00
SM0249	sec. 24, NE1/4SW1/4	40.00
SM0248	sec. 24, W1/2NW1/4	80.00
	T. 14 S., R. 39 E.,	
SM0244	sec. 4, lot 1	39.45
SM0244	sec. 4, lot 2	39.46
SM0244	sec. 4, lot 3	39.48
SM0265	sec. 5, SE1/4MW	40.00
SM0266	sec. 7, lot 3	35.49
SM0267	sec. 17, NE1/4SW1/4	40.00
SM0267	sec. 17, N1/2SE1/4	80.00
SM0268	sec. 19, E1/2NE1/4	80.00
SM0268	sec. 20, SW1/4NW1/4	40.00
SM0268	sec. 20, N1/2SW1/4	80.00
SM0269	sec. 30, lot 6	3.48
SM0269	sec. 30, lot 7	2.99
SM0269	sec. 30, lot 8	2.50
SM0269	sec. 30, lot 9	1.74
SM0298	sec. 34, NW1/4	160.00
SM0298	sec. 34, S1/2	320.00
	T. 14 S., R. 40 E.,	
SM0270	sec. 3, S1/2NW1/4	80.00
SM0270	sec. 3, N1/2SW1/4	80.00
SM0270	sec. 4, lot 2	40.36
SM0270	sec. 4, S1/2NE1/4	80.00
SM0270	sec. 4, N1/2 SE1/4	80.00
SM0271	sec. 7, NE1/4NE1/4	40.00
SM0051	sec. 9, NW1/4NE1/4	40.00
	T. 14 S., R. 41 E.,	
SM0263	sec. 4, lot 3	40.18
SM0273	sec. 5, lot 2	40.07
SM0292	sec. 12, SW1/4SW1/4	40.00
SM0289	sec. 15, SE1/4NE1/4	40.00
SM0290	sec. 17, SW1/4SW1/4	40.00
SM0291	sec. 20, NE1/4	160.00
SM0291	sec. 20, NE1/4NW1/4	40.00
SM0291	sec. 20, N1/2SE1/4	80.00

Tract	Legal description	Acres
SM0291	sec. 20, SE1/4 SE1/4	40.00
SM0291	sec. 21, N1/2	320.00
SM0274	sec. 22, E1/2 SE1/4	80.00
SM0275	sec. 23, SW1/4 NW1/4	40.00
SM0293	sec. 24, S1/2 NE1/4	80.00
SM0293	sec. 24, SW1/4 NW1/4	40.00
SM0293	sec. 24, W1/2 SW1/4	80.00
SM0293	sec. 24, SE1/4 SW1/4	40.00
SM0293	sec. 24, NE1/4 SE1/4	40.00
SM0293	sec. 24, S1/2 SE1/4	80.00
SM0276	sec. 34, S1/2 NW1/4	80.00
	T. 14 S., R. 42 E.,	
SM0277	sec. 1, lot 3	40.15
SM0278	sec. 2, lot 3	0.09
SM0279	sec. 2, SW1/4 SE1/4	40.00
SM0280	sec. 7, NE1/4 SE1/4	40.00
SM0281	sec. 10, S1/2 SE1/4	80.00
SM0282	sec. 11, SE1/4 SE1/4	40.00
SM0281	sec. 11, S1/2 SW1/4	80.00
SM0282	sec. 12, N1/2 NW1/4	80.00
SM0282	sec. 12, SW1/4 NW1/4	40.00
SM0282	sec. 12, SW1/4	160.00
SM0282	sec. 12, SE1/4 SE1/4	40.00
SM0282	sec. 13, N1/2 N1/2	160.00
SM0282	sec. 13, SW1/4 NW1/4	40.00
SM0282	sec. 14, NE1/4 NE1/4	40.00
SM0293	sec. 19, lot 2	40.34
SM0293	sec. 19, S1/2 NE1/4	0.00
SM0293	sec. 19, SE1/4 NW1/4	40.00
SM0293	sec. 19, NE1/4 SE1/4	40.00
SM0283	sec. 22, All	640.00
SM0283	sec. 23, S1/2	320.00
SM0284	sec. 24, SE1/4 SE1/4	40.00
SM0284	sec. 25, N1/2 NE1/4	80.00
SM0283	sec. 26, NW1/4 NE1/4	40.00
SM0283	sec. 26, N1/2 NW1/4	80.00
	T. 14 S., R. 43 E.,	
SM0285	sec. 6, lot 7	59.61
SM0285	sec. 6, SE1/4 SW1/4	40.00
SM0286	sec. 7, NE1/4 NE1/4	40.00
SM0287	sec. 7, SW1/4 SE1/4	40.00
SM0288	sec. 18, lot 3	59.44
SM0284	sec. 30, lot 1	57.58
SM0284	sec. 30, lot 2	57.20
SM0284	sec. 30, lot 3	56.84
SM0284	sec. 30, lot 4	56.28
SM0284	sec. 30, NE1/4 NW1/4	40.00
	T. 15 S., R. 37 E.,	
SM0294	sec. 20, NE1/4 NE1/4	40.00
SM0294	sec. 20, S1/2 NE1/4	80.00
SM0294	sec. 20, N1/2 SE1/4	80.00
SM0295	sec. 28, NE1/4 SE1/4	40.00
SM0296	sec. 32, NE1/4 NW1/4	40.00
SM0297	sec. 32, SW1/4 NW1/4	40.00
SM0297	sec. 32, SW1/4	160.00
	T. 15 S., R. 39 E.,	
SM0299	sec. 4, lot 1	41.17
SM0299	sec. 4, S1/2 NE1/4	80.00
SM0299	sec. 4, SE1/4 NW1/4	40.00
SM0299	sec. 4, NE1/4 SW1/4	40.00
SM0299	sec. 4, S1/2 SW1/4	80.00
SM0299	sec. 4, SE1/4	160.00
SM0300	sec. 10, NE1/4	160.00
SM0300	sec. 10, E1/2 NW1/4	80.00
SM0300	sec. 10, NE1/4 SW1/4	40.00
SM0300	sec. 10, N1/2 SE1/4	80.00
SM0301	sec. 12, All	640.00
SM0302	sec. 26, NW1/4	160.00
SM0305	sec. 26, SE1/4 SE1/4	40.00
SM0302	sec. 26, W1/2 SW1/4	80.00
SM0302	sec. 27, All	640.00
SM0303	sec. 29, W1/2 NE1/4	80.00
SM0303	sec. 29, SE1/4 NE1/4	40.00
SM0303	sec. 29, SE1/4 NW1/4	40.00
SM0303	sec. 29, SW1/4	160.00
SM0303	sec. 29, SW1/4 SE1/4	40.00
SM0304	sec. 34, SE1/4 SE1/4	40.00
SM0304	sec. 35, SW1/4 SW1/4	40.00
SM0302	sec. 35, W1/2 NW1/4	80.00
SM0305	sec. 35, E1/2 E1/2	160.00
SM0305	sec. 36, All	640.00
	T. 15 S., R. 40 E.,	
SM0306	sec. 23, S1/2 SE1/4	80.00
SM0308	sec. 29, SW1/4 NW1/4	40.00
SM0307	sec. 29, SE1/4 NE1/4	40.00
SM0307	sec. 29, NE1/4 SE1/4	40.00
SM0305	sec. 30, lot 2	39.87
SM0305	sec. 30, lot 3	39.86
SM0305	sec. 30, lot 4	39.85
SM0305	sec. 30, SE1/4 NW1/4	40.00
SM0305	sec. 30, E1/2 SW1/4	80.00
SM0305	sec. 30, W1/2 SE1/4	80.00
SM0305	sec. 30, SE1/4 SE1/4	40.00
SM0305	sec. 31, lot 1	39.92
SM0305	sec. 31, lot 2	39.94
SM0305	sec. 31, lot 3	39.96
SM0305	sec. 31, lot 4	39.98
SM0305	sec. 31, W1/2 NE1/4	80.00
SM0305	sec. 31, SE1/4 NE1/4	40.00
SM0305	sec. 31, E1/2 W1/2	160.00
SM0305	sec. 31, SE1/4	160.00
	T. 15 S., R. 41 E.,	
SM0309	sec. 4, lot 2	40.34
SM0309	sec. 4, lot 3	40.38
SM0309	sec. 4, lot 4	40.42
SM0309	sec. 4, SW1/4 NW1/4	40.00
SM0309	sec. 4, NW1/4 SW1/4	40.00
SM0310	sec. 18, NE1/4 NE1/4	40.00
SM0311	sec. 19, SE1/4 SE1/4	40.00
SM0312	sec. 32, NW1/4 NW1/4	40.00
SM0313	sec. 35, NW1/4 NW1/4	40.00
	T. 15 S., R. 42 E.,	
SM0314	sec. 14, NE1/4	160.00
SM0034	sec. 14, NE1/4	160.00
SM0315	sec. 18, E1/2 E1/2	160.00
SM0035	sec. 27, E1/2 NW1/4 NE1/4	20.00
SM0316	sec. 35, SW1/4 NE1/4	40.00

Tract	Legal description	Acres
SM0316	sec. 35, S1/2	320.00
	T. 15 S., R. 43 E.,	
SM0003	sec. 32, NE1/4NE1/4SE1/4	10.00
	T. 15 S., R. 44 E.,	
SM0014	sec. 14, N1/2SW1/4NE1/4	20.00
SM0014	sec. 14, NW1/4 SE1/4NE1/4	10.00
	T. 15 S., R. 45 E.,	
SM0010	sec. 16, SE1/4NW1/4 SW1/4	10.00
SM0022	sec. 16, NW1/4 NW1/4 SE1/4	10.00
SM0011	sec. 17, S1/2SE1/4SW1/4SE1/4	5.00
SM0012	sec. 18, W1/2SW1/4NE1/4SW1/4	5.00
SM0013	sec. 20, NW1/4SW1/4NE1/4	10.00
SM0013	sec. 20, N1/2SE1/4NW1/4	20.00
	T. 16 S., R. 37 E.,	
SM0318	sec. 8, SW1/4	160.00
SM0321	sec. 13, S1/2NW1/4	80.00
SM0321	sec. 13, W1/2SW1/4	80.00
SM0320	sec. 18, SE1/4SW1/4	40.00
SM0319	sec. 18, E1/2NE1/4	80.00
SM0320	sec. 18, S1/2SE1/4	80.00
	T. 16 S., R. 38 E.,	
SM0322	sec. 2, SW1/4NE1/4	40.00
SM0323	sec. 12, NE1/4NE1/4	40.00
SM0324	sec. 13, SE1/4NE1/4	40.00
SM0324	sec. 13, NE1/4SE1/4	40.00
	T. 16 S., R. 39 E.,	
SM0305	sec. 1, lot 1	39.96
SM0305	sec. 1, lot 2	39.89
SM0305	sec. 1, lot 3	39.81
SM0305	sec. 1, lot 4	39.74
SM0305	sec. 1, S1/2 N1/2	160.00
SM0304	sec. 2, lot 4	41.02
SM0305	sec. 2, lot 1	39.88
SM0305	sec. 2, lot 2	40.26
SM0304	sec. 2, SW1/4 NW1/4	40.00
SM0305	sec. 2, SE1/4 NE1/4	40.00
SM0305	sec. 2, NE1/4 SE1/4	40.00
SM0304	sec. 3, lot 1	41.31
SM0304	sec. 3, SE1/4 NE1/4	40.00
SM0323	sec. 6, E1/2 SW1/4	80.00
SM0323	sec. 6, W1/2 SE1/4	80.00
SM0323	sec. 7, lot 1	35.29
SM0323	sec. 7, N1/2 NE1/4	80.00
SM0323	sec. 7, E1/2 NW1/4	80.00
SM0323	sec. 7, NE1/4 SW1/4	40.00
SM0325	sec. 12, NW1/4 NE1/4	40.00
SM0324	sec. 18, lot 2	35.49
	T. 16 S., R. 40 E.,	
SM0326	sec. 4, lot 2	40.27
SM0327	sec. 10, SE1/4NE1/4	40.00
SM0327	sec. 10, E1/2SE1/4	80.00
SM0328	sec. 12, E1/2SW1/4	80.00
SM0328	sec. 12, W1/2SE1/4	80.00
SM0328	sec. 13, W1/2NE1/4	80.00
SM0328	sec. 13, N1/2NW1/4	80.00
SM0328	sec. 13, SE1/4NW1/4	40.00
SM0328	sec. 13, NW1/4SE1/4	40.00
SM0328	sec. 14, N1/2NE1/4	80.00
SM0327	sec. 14, SW1/4NW1/4	40.00
SM0327	sec. 14, NW1/4SW1/4	40.00
SM0327	sec. 15, NE1/4	160.00
SM0327	sec. 15, N1/2SE1/4	80.00
SM0329	sec. 17, S1/2SE1/4	80.00
SM0329	sec. 20, E1/2	320.00
SM0329	sec. 21, W1/2NW1/4	80.00
SM0330	sec. 21, SE1/4SE1/4	40.00
SM0329	sec. 21, NW1/4SW1/4	40.00
SM0331	sec. 22, NE1/4NE1/4	40.00
SM0332	sec. 22, E1/2SW1/4	80.00
SM0329	sec. 29, N1/2NE1/4	80.00
SM0329	sec. 29, NE1/4NW1/4	40.00
	T. 16 S., R. 41 E.,	
SM0333	sec. 5, lot 1	45.03
SM0334	sec. 8, SW1/4	160.00
SM0334	sec. 8, W1/2SE1/4	80.00
SM0334	sec. 17, E1/2	320.00
SM0335	sec. 17, SW1/4SW1/4	40.00
SM0335	sec. 18, SE1/4SE1/4	40.00
SM0335	sec. 19, NE1/4NE1/4	40.00
SM0334	sec. 20, NE1/4	160.00
SM0334	sec. 21, W1/2NW1/4	80.00
SM0336	sec. 24, NW1/4NW1/4	40.00
SM0337	sec. 31, lot 3	26.56
SM0337	sec. 31, lot 4	26.89
SM0337	sec. 31, lot 9	27.22
	T. 16 S., R. 42 E.,	
SM0316	sec. 1, lot 1	41.26
SM0316	sec. 1, lot 2	41.19
SM0316	sec. 1, lot 3	41.11
SM0316	sec. 1, lot 4	41.04
SM0316	sec. 1, S1/2N1/2	160.00
SM0316	sec. 2, lot 1	40.98
SM0316	sec. 2, lot 2	40.96
SM0316	sec. 2, lot 3	40.93
SM0316	sec. 2, lot 4	40.91
SM0316	sec. 2, S1/2N1/2	160.00
SM0316	sec. 2, W1/2SW1/4	80.00
SM0316	sec. 3, lot 1	40.84
SM0317	sec. 3, lot 3	40.60
SM0316	sec. 3, SE1/4NE1/4	40.00
SM0316	sec. 3, NE1/4SE1/4	40.00
SM0316	sec. 3, S1/2SE1/4	80.00
	T. 16 S., R. 46 E.,	
SM0046	sec. 3, lot 1	67.17
SM0046	sec. 3, lot 2	67.27
SM0047	sec. 3, S1/2NW1/4	80.00
SM0047	sec. 3, SW1/4	160.00
SM0038	sec. 4, N1/2S1/2SW1/4NW1/4	10.00
SM0038	sec. 4, NW1/4SW1/4SE1/4NW1/4	2.50
SM0038	sec. 5, lot 1	67.51
SM0038	sec. 5, N1/2SE1/4NE1/4	20.00
SM0038	sec. 5, S1/2SE1/4NE1/4	20.00
SM0048	sec. 9, SE1/4SE1/4	40.00
SM0048	sec. 10, S1/2S1/2	160.00

Tract	Legal description	Acres
SM0056	sec. 13, NW1/4 SE1/4	40.00
SM0017	sec. 15, SW1/4 NE1/4 SE1/4	10.00
SM0338	sec. 23, SE1/4 SE1/4	40.00
SM0339	sec. 27, S1/2	320.00
SM0339	sec. 28, SE1/4 SE1/4	40.00
SM0340	sec. 32, NE1/4 SW1/4	40.00
SM0341	sec. 32, SW1/4 SE1/4	40.00
SM0339	sec. 32, SE1/4 NE1/4	40.00
SM0339	sec. 33, N1/2 NE1/4	80.00
SM0339	sec. 33, SE1/4 NE1/4	40.00
SM0339	sec. 33, NW1/4	160.00
SM0339	sec. 33, N1/2 SW1/4	80.00
SM0339	sec. 34, W1/2 NE1/4	80.00
SM0339	sec. 34, N1/2 NW1/4	80.00
SM0339	sec. 34, SE1/4 NW1/4	40.00
SM0339	sec. 34, NW1/4 SE1/4	40.00
SM0342	sec. 35, SW1/4 SE1/4	40.00
	T. 16 S., R. 47 E.,	
SM0053	sec. 7, lot 4	39.83
SM0053	sec. 7, SE1/4 SW1/4	40.00
SM0053	sec. 18, lot 1	40.00
SM0053	sec. 18, lot 2	40.00
SM0054	sec. 18, lot 4	40.00
SM0055	sec. 18, NE1/4 SW1/4	40.00
	T. 17 S., R. 39 E.,	
SM0346	sec. 28, SE1/4 SE1/4	40.00
	T. 17 S., R. 44 E.,	
SM0347	sec. 2, SW1/4	160.00
	T. 17 S., R. 46 E.,	
SM0342	sec. 2, lot 1	40.10
SM0342	sec. 2, lot 2	40.18
SM0342	sec. 2, S1/2 NE1/4	80.00
SM0343	sec. 3, lot 3	40.15
SM0343	sec. 3, lot 4	40.05
SM0344	sec. 4, lot 4	40.11
SM0344	sec. 5, lot 1	40.23
SM0345	sec. 5, SW1/4 SW1/4	40.00
	T. 18 S., R. 36 E.,	
SM0021	sec. 24, NE1/4 NE1/4 NW1/4	10.00
	T. 18 S., R. 40 E.,	
SM0007	sec. 3, lot 4	38.92
SM0018	sec. 8, SW1/4 SW1/4 NW1/4 NE1/4	2.50
SM0018	sec. 8, S1/2 S1/2 NE1/4 NW1/4	10.00
SM0018	sec. 8, SE1/4 SE1/4 NW1/4 NW1/4	2.50
SM0019	sec. 9, S1/2 S1/2 SW1/4 NE1/4	10.00
SM0019	sec. 9, S1/2 SE1/4 NW1/4	20.00
SM0020	sec. 10, SW1/4 SW1/4 NE1/4 SE1/4	2.50
	T. 18 S., R. 41 E.,	
SM0024	sec. 14, NE1/4 NE1/4	40.00
SM0025	sec. 14, SW1/4 SW1/4	40.00
SM0026	sec. 17, E1/2 E NE1/4 NW1/4	10.00
	T. 18 S., R. 42 E.,	
SM0008	sec. 19, lot 3	40.20
SM0008	sec. 19, lot 4	40.07
	T. 19 S., R. 37 E.,	
SM0023	sec. 1, SE1/4 NW1/4	40.00
SM0049	sec. 1, W1/2 NW1/4 NE1/4	20.00
	T. 19 S., R. 39 E.,	
SM0348	sec. 8, S1/2 SW1/4	80.00
SM0349	sec. 8, E1/2 SE1/4	80.00
SM0351	sec. 16, N1/2 SE1/4	80.00
SM0350	sec. 16, SW1/4 NW1/4	40.00
SM0352	sec. 17, E1/2 SE1/4	80.00
	T. 19 S., R. 40 E.,	
SM0353	sec. 9, NW1/4 SE1/4	40.00
SM0354	sec. 10, SW1/4 NW1/4	40.00
	T. 19 S., R. 43 E.,	
SM0002	sec. 4, lot 2	40.86
	T. 19 S., R. 45 E.,	
SM0004	sec. 6, NW1/4 SE1/4 NE1/4	10.00
	T. 20 S., R. 37 E.,	
SM0001	sec. 26, W1/2 SW1/4 NW1/4 SW1/4	5.00
SM0050	sec. 35, NE1/4 SE1/4	40.00
	T. 20 S., R. 39 E.,	
SM0036	sec. 28, SE1/4 SE1/4 SW1/4	10.00
	T. 20 S., R. 44 E.,	
SM0030	sec. 2, SW1/4 NE1/4	40.00
SM0030	sec. 2, NW1/4 SE1/4	40.00
SM0031	sec. 3, E1/2 NW1/4 SW1/4	20.00
SM0031	sec. 3, E1/2 NE1/4 SW1/4 SW1/4	5.00
	T. 20 S., R. 45 E.,	
SM0037	sec. 10, N1/2 NW1/4 SW1/4 SW1/4	15.00
	T. 21 S., R. 37 E.,	
SM0356	sec. 9, E1/2 E NE1/4	40.00
SM0356	sec. 9, E1/2 NE1/4 SE1/4	20.00
SM0356	sec. 10, W1/2 SW1/4 NW1/4	20.00
SM0356	sec. 10, W1/2 NW1/4 SW1/4	20.00
	T. 21 S., R. 38 E.,	
SM0032	sec. 9, S1/2 SE1/4 SW1/4 SW1/4	5.00
	T. 23 S., R. 46 E.,	
SM0009	sec. 28, NE1/4 SE1/4 NE1/4	10.00
SM0015	sec. 33, W1/2 W1/2 NE1/4 SE1/4	5.00
	T. 24 S., R. 36 E.,	
SM0365	sec. 35, S1/2 SE1/4	80.00
	T. 24 S., R. 46 E.,	
SM0016	sec. 4, lot 3	26.41
SM0016	sec. 4, lot 4	26.30
SM0016	sec. 4, lot 6	40.00
	T. 25 S., R. 36 E.,	
SM0365	sec. 2, lot 1	41.03
SM0365	sec. 2, lot 2	40.96
SM0365	sec. 2, lot 3	40.90

Tract	Legal description	Acres
SM0365	sec. 2, S1/2 NE1/4	80.00
SM0365	sec. 2, SE1/4 NW1/4	40.00
SM0365	sec. 2, NE1/4 SW1/4	40.00
SM0365	sec. 2, S1/2 SW1/4	80.00
SM0365	sec. 2, SE1/4	160.00
SM0366	sec. 10, NE1/4	160.00
SM0366	sec. 10, E1/2 SE1/4	80.00
SM0367	sec. 12, All	640.00
SM0368	sec. 14, All	640.00
SM0369	sec. 24, All	640.00
	T. 25 S., R. 37 E.,	
SM0370	sec. 16, All	640.00
SM0371	sec. 18, lot 1	39.25
SM0371	sec. 18, lot 2	39.30
SM0371	sec. 18, lot 3	39.36
SM0371	sec. 18, lot 4	39.41
SM0371	sec. 18, E1/2	320.00
SM0371	sec. 18, E1/2 W1/2	160.00
SM0372	sec. 20, All	640.00
SM0373	sec. 28, All	640.00
SM0374	sec. 30, lot 1	39.68
SM0374	sec. 30, lot 2	39.72
SM0374	sec. 30, lot 3	39.76
SM0374	sec. 30, lot 4	39.80
SM0374	sec. 30, E1/2	320.00
SM0374	sec. 30, E1/2 W1/2	160.00
SM0375	sec. 32, S1/2	320.00
SM0377	sec. 34, N1/2 NW1/4	80.00
SM0376	sec. 34, E1/2 NE1/4	80.00
SM0376	sec. 34, SE1/4	160.00
	T. 25 S., R. 38 E.,	
SM0378	sec. 35, S1/2 NE1/4	80.00
SM0378	sec. 35, SE1/4 NW1/4	40.00
	T. 25 S., R. 40 E.,	
SM0379	sec. 25, W1/2 SW1/4	80.00
SM0379	sec. 26, SE1/4 SE1/4	40.00
SM0379	sec. 35, E1/2 NE1/4	80.00
SM0380	sec. 36, S1/2 SW1/4	80.00
SM0380	sec. 36, SW1/4 SE1/4	40.00
	T. 25 S., R. 41 E.,	
SM0381	sec. 30, lot 1	39.62
SM0381	sec. 30, E1/2 NW1/4	80.00
SM0381	sec. 30, NE1/4 SW1/4	40.00
	T. 26 S., R. 36 E.,	
SM0045	sec. 4, SE1/4 SE1/4 SW1/4 NE1/4	2.50
SM0045	sec. 4, S1/2 S1/2 S1/2 SE1/4 NE1/4	5.00
SM0382	sec. 8, W1/2 NW1/4	80.00
SM0383	sec. 22, All	640.00
SM0385	sec. 26, NE1/4 SE1/4	40.00
SM0384	sec. 26, N1/2 N1/2	160.00
SM0384	sec. 26, SW1/4 NW1/4	40.00
SM0385	sec. 26, S1/2 SE1/4	80.00
SM0052	sec. 28, NE1/4 SE1/4 NE1/4	10.00
SM0386	sec. 36, SW1/4 SW1/4	40.00
SM0387	sec. 36, E1/2 SE1/4	80.00
	T. 26 S., R. 37 E.,	
SM0393	sec. 4, lot 1	52.84
	T. 26 S., R. 39 E.,	
SM0391	sec. 14, S1/2 SE1/4	80.00
SM0390	sec. 14, NE1/4 NW1/4	40.00
SM0389	sec. 22, W1/2 NE1/4	80.00
SM0389	sec. 22, SE1/4 NE1/4	40.00
SM0389	sec. 22, NW1/4	160.00
SM0392	sec. 34, W1/2 SW1/4	80.00
	T. 26 S., R. 40 E.,	
SM0380	sec. 1, lot 4	13.78
SM0380	sec. 1, NW1/4 SW1/4	40.00
SM0394	sec. 18, SW1/4 SE1/4	40.00
SM0394	sec. 19, N1/2 NE1/4	80.00
SM0395	sec. 19, SE1/4 SE1/4	40.00
SM0394	sec. 19, NE1/4 NW1/4	40.00
SM0395	sec. 20, W1/2 SW1/4	80.00
SM0395	sec. 20, SE1/4 SW1/4	40.00
SM0395	sec. 20, S1/2 SE1/4	80.00
SM0395	sec. 29, N1/2 NE1/4	80.00
SM0395	sec. 29, SW1/4 NE1/4	40.00
SM0395	sec. 29, W1/2	320.00
SM0395	sec. 29, SE1/4	160.00
SM0395	sec. 30, E1/2	320.00
SM0395	sec. 31, lot 4	37.66
SM0395	sec. 31, lot 5	41.20
SM0395	sec. 31, lot 6	40.72
SM0395	sec. 31, lot 7	40.24
SM0395	sec. 31, N1/2 NE1/4	80.00
SM0395	sec. 31, SE1/4 NE1/4	40.00
SM0395	sec. 31, NE1/4 SE1/4	40.00
SM0395	sec. 32, N1/2 NE1/4	80.00
SM0395	sec. 32, SW1/4 NE1/4	40.00
SM0395	sec. 32, W1/2	320.00
SM0395	sec. 32, W1/2 SE1/4	80.00
SM0396	sec. 33, S1/2 SE1/4	80.00
SM0395	sec. 33, W1/2 NW1/4	80.00
SM0395	sec. 33, SE1/4 NW1/4	40.00
	T. 26 S., R. 42 E.,	
SM0397	sec. 24, S1/2 NE1/4	80.00
SM0397	sec. 24, NW1/4 SE1/4	40.00
	T. 26 S., R. 46 E.,	
SM0027	sec. 4, lot 3	41.01
SM0028	sec. 28, SW1/4 SW1/4 SW1/4 SW1/4	2.50
	T. 27 S., R. 36 E.,	
SM0388	sec. 1, lot 2	40.23
SM0388	sec. 1, SW1/4 NE1/4	40.00
SM0388	sec. 1, NW1/4 SE1/4	40.00
	T. 27 S., R. 40 E.,	
SM0395	sec. 6, lot 3	40.72
SM0395	sec. 6, lot 4	36.87
SM0395	sec. 6, lot 5	35.95
SM0395	sec. 6, lot 6	35.25
SM0395	sec. 6, lot 7	34.55
SM0395	sec. 6, SE1/4 NW1/4	40.00

Tract	Legal description	Acres
SM0395	sec. 6, E1/2 SW1/4	80.00
SM0395	sec. 7, lot 1	34.12
SM0395	sec. 7, N1/2 NE1/4	160.00
SM0395	sec. 7, NE1/4 NW1/4	40.00
	T. 27 S., R. 45 E.,	
SM0029	sec. 26, W1/2 W1/2 NW1/4 SW1/4	10.00
	T. 27 S., R. 46 E.,	
SM0039	sec. 13, SW1/4 SW1/4 SE1/4 SW1/4	2.50
SM0040	sec. 14, E1/2 NE1/4 SE1/4	20.00
SM0041	sec. 14, NE1/4 NE1/4 SW1/4	10.00
SM0039	sec. 24, NE1/4 NW1/4	40.00
SM0042	sec. 25, E1/2 E SE1/4 NW1/4	10.00
	T. 27 S., R. 47 E.,	
SM0043	sec. 31, lot 2	33.47
	T. 28 S., R. 44 E.	
SM0193	sec. 14, W1/2 NW1/4 SE1/4	20.00
SM0194	sec. 23, W1/2 NE1/4 NE1/4	20.00
	T. 28 S., R. 45 E.	
SM0206	sec. 19, E1/2 SW1/4 SE1/4	20.00
SM0206	sec. 19, SW1/4 SW1/4 SE1/4	10.00
SM0207	sec. 20, N1/2 SE1/4 NE1/4	20.00
SM0208	sec. 26, S1/2 SE1/4 NE1/4	20.00
SM0209	sec. 26, S1/2 NW1/4 SW1/4	20.00
	T. 28 S., R. 46 E.	
SM0228	sec. 14, NE1/4 NE1/4	40.00
SM0229	sec. 14, N1/2 NW1/4	80.00
SM0044	sec. 14, SE1/4 NE1/4 NE1/4	10.00
SM0229	sec. 14, SE1/4 NW1/4	40.00
SM0229	sec. 14, NE1/4 SW1/4	40.00
SM0229	sec. 14, S1/2 SW1/4	80.00
SM0229	sec. 15, SE1/4 SE1/4	40.00
SM0230	sec. 15, NW1/4 NW1/4	40.00
Subtotal		37,744.61
Jordan Resource Area		
	T. 28 S., R. 36 E.	
SJ0448	sec. 14, SW1/4 SW1/4	40.00
	T. 28 S., R. 37 E.	
SJ0449	sec. 3, NW1/4 SE1/4	40.00
	T. 28 S., R. 44 E.	
SJ0195	sec. 25, SW1/4 NW1/4 SE1/4	10.00
SJ0197	sec. 36, N1/2 NE1/4 SW1/4	20.00
SJ0196	sec. 36, SE1/4 NE1/4	40.00
	T. 28 S., R. 45 E.	
SJ0210	sec. 34, N1/2 N1/2 SE1/4 NE1/4	10.00
SJ0210	sec. 35, N1/2 NW1/4 NE1/4	20.00
SJ0210	sec. 35, N1/2 N1/2 SE1/4 NW1/4	10.00
SJ0210	sec. 35, N1/2 N1/2 SW1/4 NW1/4	10.00
	T. 28 S., R. 46 E.	
SJ0179	sec. 13, SE1/4 NE1/4	40.00
SJ0178	sec. 26, N1/2 N1/2 SE1/4 NW1/4	10.00
SJ0192	sec. 30, lot 2	40.80
	T. 29 S., R. 41 E.	
SJ0180	sec. 11, N1/2 NE1/4 NE1/4	20.00
	T. 29 S., R. 44 E.	
SJ0181	sec. 16, SW1/4 SE1/4	40.00
SJ0182	sec. 20, E1/2 SE1/4	80.00
SJ0183	sec. 21, SW1/4 NW1/4	40.00
SJ0184	sec. 28, N1/2 NE1/4 SE1/4	20.00
SJ0182	sec. 29, E1/2 NE1/4	80.00
SJ0182	sec. 29, N1/2 NE1/4 SE1/4	20.00
SJ0182	sec. 29, N1/2 S1/2 NE1/4 SE1/4	10.00
	T. 29 S., R. 46 E.	
SJ0232	sec. 15, NW1/4 NW1/4	40.00
SJ0232	sec. 15, NW1/4 NW1/4	40.00
SJ0233	sec. 34, SE1/4 NE1/4	40.00
SJ0233	sec. 34, SE1/4 NE1/4	40.00
SJ0233	sec. 34, E1/2 SE1/4	80.00
SJ0444	sec. 35, SE1/4	160.00
	T. 29 S., R. 47 E.	
SJ0235	sec. 30, lot 3	35.72
SJ0235	sec. 30, lot 4	35.67
	T. 30 S., R. 38 E.	
SJ0149	sec. 1, N1/2 N1/2 N1/2 NW1/4 SW1/4	5.00
SJ0149	sec. 2, N1/2 NE1/4 NE1/4 NE1/4 SE1/4	1.25
	T. 30 S., R. 43 E.	
SJ0222	sec. 14, W1/2	320.00
SJ0224	sec. 20, All	640.00
SJ0223	sec. 26, All	640.00
	T. 30 S., R. 44 E.	
SJ0212	sec. 2, lot 1	40.40
SJ0212	sec. 2, lot 2	40.22
SJ0212	sec. 2, lot 3	40.03
SJ0212	sec. 2, lot 4	39.85
SJ0212	sec. 2, S1/2 N1/2	160.00
SJ0212	sec. 2, S1/2	320.00
SJ0213	sec. 12, All	640.00
SJ0214	sec. 28, NE1/4 NE1/4	40.00
SJ0214	sec. 28, W1/2	320.00
SJ0214	sec. 28, SE1/4	160.00
SJ0214	sec. 28, W1/2 NE1/4	80.00
	T. 30 S., R. 45 E.	
SJ0215	sec. 4, lot 1	40.22
SJ0215	sec. 4, lot 2	40.50
SJ0215	sec. 4, lot 3	40.78
SJ0215	sec. 4, lot 4	41.06
SJ0215	sec. 4, S1/2 N1/2	160.00
SJ0215	sec. 4, N1/2 S1/2	160.00
SJ0215	sec. 4, S1/2 SW1/4	80.00
SJ0216	sec. 6, lot 1	40.54
SJ0216	sec. 6, lot 2	40.39
SJ0216	sec. 6, lot 3	40.23
SJ0216	sec. 6, lot 4	41.40
SJ0216	sec. 6, lot 5	41.29
SJ0216	sec. 6, lot 6	41.25
SJ0216	sec. 6, lot 7	41.22

Tract	Legal description	Acres
SJ0216	sec. 6, S1/2 NE1/4	80.00
SJ0216	sec. 6, SE1/4 NW1/4	40.00
SJ0216	sec. 6, W1/2 SW1/4	80.00
SJ0216	sec. 6, SE1/4	160.00
SJ0217	sec. 8, N1/2 NE1/4	80.00
SJ0217	sec. 8, SE1/4 NE1/4	40.00
SJ0217	sec. 8, W1/2	320.00
SJ0217	sec. 8, SE1/4	160.00
SJ0219	sec. 10, N1/2 NE1/4	80.00
SJ0219	sec. 10, NE1/4 NW1/4	40.00
SJ0219	sec. 10, S1/2 N1/2	160.00
SJ0219	sec. 10, S1/2	320.00
SJ0220	sec. 16, W1/2 E1/2	160.00
SJ0220	sec. 16, E1/2 E1/2	160.00
SJ0220	sec. 16, SW1/4	160.00
SJ0218	sec. 18, lot 1	41.51
SJ0218	sec. 18, lot 2	41.54
SJ0218	sec. 18, lot 3	41.56
SJ0218	sec. 18, lot 4	41.59
SJ0218	sec. 18, E1/2	320.00
SJ0218	sec. 18, E1/2 W1/2	160.00
SJ0221	sec. 20, All	640.00
SJ0174	sec. 32, lot 1	42.34
	T. 30 S., R. 46 E.	
SJ0234	sec. 2, lot 4	39.70
SJ0234	sec. 2, lot 4	39.70
SJ0205	sec. 8, SW1/4	160.00
	T. 30 S., R. 47 E.	
SJ0236	sec. 6, lot 1	37.33
SJ0236	sec. 6, lot 2	37.43
SJ0236	sec. 6, lot 3	37.52
SJ0236	sec. 6, lot 4	37.61
	T. 31 S., R. 41 E.	
SJ0152	sec. 8, E1/2 SE1/4	80.00
SJ0151	sec. 10, N1/2	320.00
SJ0151	sec. 10, N1/2 S1/2	160.00
SJ0151	sec. 10, S1/2 SE1/4	80.00
SJ0153	sec. 12, S1/2 SW1/4	80.00
SJ0450	sec. 14, W1/2 SW1/4	80.00
SJ0154	sec. 14, NE1/4 NE1/4	40.00
SJ01502	sec. 18, E1/2 SW1/4 SE1/4	20.00
SJ04511	sec. 20, E1/2	320.00
SJ04511	sec. 20, E1/2 W1/2	160.00
SJ04521	sec. 22, S1/2	320.00
SJ04531	sec. 26, All	640.00
SJ04541	sec. 28, All	640.00
SJ04551	sec. 34, All	640.00
SJ0456	sec. 36, W1/2	320.00
	T. 31 S., R. 42 E.	
SJ0171	sec. 13, NE1/4 NE1/4 SW1/4 SW1/4	2.50
SJ0170	sec. 14, E1/2 SE1/4 SW1/4 NE1/4	5.00
SJ0170	sec. 14, W1/2 NW1/4 SE1/4	20.00
SJ0169	sec. 14, N1/2 NE1/4 SE1/4 SE1/4	5.00
SJ0169	sec. 14, NW1/4 SE1/4 SE1/4	10.00
SJ0172	sec. 24, NE1/4 NE1/4 NW1/4	10.00
SJ0173	sec. 24, N1/2 N1/2 NE1/4 SE1/4	10.00
SJ01682	sec. 30, SE1/4 NW1/4	4.00

Tract	Legal description	Acres
	T. 32 S., R. 40 E.	
SJ0155	sec. 14, All	639.64
SJ0156	sec. 22, All	640.00
SJ0157	sec. 24, All	640.00
SJ0158	sec. 26, All	640.00
SJ0159	sec. 36, All	640.00
	T. 32 S., R. 41 E.	
SJ01641	sec. 4, lot 1	40.14
SJ01641	sec. 4, lot 2	39.99
SJ01641	sec. 4, lot 3	39.83
SJ01641	sec. 4, lot 4	39.68
SJ01641	sec. 4, S1/2 N1/2	160.00
SJ01641	sec. 4, S1/2	20.00
SJ0165	sec. 6, lot 4	39.86
SJ0165	sec. 6, lot 5	39.85
SJ0165	sec. 6, lot 6	39.75
SJ01661	sec. 8, All	640.00
SJ0167	sec. 18, lot 1	40.33
SJ0167	sec. 18, lot 2	40.36
SJ0167	sec. 18, lot 3	40.38
SJ0167	sec. 18, lot 4	40.41
SJ0167	sec. 18, E1/2	320.00
SJ0167	sec. 18, E1/2 W1/2	160.00
	T. 32 S., R. 44 E.,	
SJ0175	sec. 4, SE1/4 SE1/4 SW1/4	10.00
SJ0176	sec. 9, W1/2 NW1/4 NE1/4 NE1/4	5.00
SJ0177	sec. 16, W1/2 NW1/4 NW1/4 NE1/4	5.00
	T. 32 S., R. 45 E.,	
SJ0198	sec. 3, SE1/4 NE1/4 SE1/4	10.00
SJ0199	sec. 9, SE1/4 SW1/4 NE1/4	10.00
SJ0200	sec. 9, S1/2 NE1/4 SW1/4	20.00
SJ0201	sec. 10, NW1/4 NE1/4 NW1/4	10.00
SJ0202	sec. 11, W1/2 NE1/4 NE1/4	20.00
SJ0203	sec. 33, S1/2 SE1/4 NE1/4	20.00
	T. 32 S., R. 46 E.,	
SJ0185	sec. 14, S1/2 S1/2 SW1/4 SE1/4	10.00
SJ0185	sec. 14, S1/2 S1/2 SE1/4 SE1/4	10.00
SJ0187	sec. 23, E1/2 NE1/4 SW1/4 NW1/4	5.00
SJ0186	sec. 23, NE1/4 NW1/4	40.00
SJ0187	sec. 23, E1/2 SW1/4 SW1/4 NW1/4	5.00
SJ0187	sec. 23, SE1/4 SW1/4 NW1/4	10.00
SJ0187	sec. 23, E1/2 NW1/4 SW1/4	20.00
SJ0187	sec. 23, E1/2 W1/2 NW1/4 SW1/4	10.00
SJ0187	sec. 23, N1/2 NE1/4 SW1/4 SW1/4	5.00
SJ0187	sec. 23, NE1/4 NW1/4 SW1/4 SW1/4	2.50
SJ0188	sec. 27, W1/2 NW1/4 NE1/4 NW1/4	5.00
SJ0189	sec. 27, SW1/4 SW1/4 SW1/4	10.00
SJ0190	sec. 28, S1/2 SW1/4 NE1/4 SW1/4	5.00
SJ0191	sec. 34, N1/2 SW1/4 NW1/4	20.00
	T. 33 S., R. 39 E.,	
SJ0144	sec. 14, S1/2 NE1/4	80.00
SJ0145	sec. 14, SW1/4 NW1/4	40.00
SJ0146	sec. 22, E1/2 NE1/4 NW1/4 NE1/4	5.00
SJ0147	sec. 24, E1/2	320.00
SJ0148	sec. 36, E1/2 E1/2	160.00
SJ0457	sec. 36, W1/2 E1/2	160.00
SJ0457	sec. 36, W1/2	320.00

Tract	Legal description	Acres
	T. 33 S., R. 40 E.,	
SJ0160	sec. 12, All	640.00
SJ0161	sec. 16, All	640.00
SJ0162	sec. 24, NE1/4	160.00
SJ0162	sec. 24, NE1/4 NW1/4	40.00
SJ0162	sec. 24, E1/2 SE1/4	80.00
SJ0163	sec. 36, All	640.00
	T. 33 S., R. 45 E.,	
SJ0204	sec. 4, lot 1	39.87
	T. 33 S., R. 46 E.,	
SJ0226	sec. 27, S1/2 NW1/4 SW1/4	20.00
SJ0226	sec. 27, W1/2 SW1/4 SE1/4	20.00
SJ0226	sec. 28, S1/2 NE1/4 SE1/4	20.00
SJ0227	sec. 34, W1/2 NW1/4 NE1/4	20.00
	T. 33.50 S., R. 39 E.,	
SJ0457	sec. 36, lot 3	25.11
SJ0148	sec. 36, lot 1	25.36
SJ0148	sec. 36, lot 2	25.20
SJ0457	sec. 36, lot 4	24.93
SJ0148	sec. 36, SE1/4	160.00
SJ0457	sec. 36, SW1/4	160.00
	T. 33.50 S., R. 40 E.,	
SJ0163	sec. 36, lot 1	21.84
SJ0163	sec. 36, lot 2	26.17
SJ0163	sec. 36, lot 3	26.15
SJ0163	sec. 36, lot 4	26.12
SJ0163	sec. 36, lot 5	33.38
SJ0163	sec. 36, lot 6	33.40
SJ0163	sec. 36, SW1/4	160.00
SJ0163	sec. 36, W1/2 SE1/4	80.00
	T. 37 S., R. 37 E.,	
SJ0225	sec. 4, W1/2 SW1/4 SW1/4 NE1/4	5.00
SJ0225	sec. 4, W1/2 W1/2 NW1/4 SE1/4	10.00
	T. 37 S., R. 46 E.,	
SJ0141	sec. 30, E1/2 NE1/4 SE1/4 SE1/4	5.00
SJ0141	sec. 30, SE1/4 SE1/4 SE1/4	10.00
SJ0142	sec. 31, SE1/4 SE1/4 NW1/4 NE1/4	2.50
	T. 38 S., R. 41 E.,	
SJ0143	sec. 30, lot 1	40.76
SJ0143	sec. 30, lot 2	40.69
	T. 40 S., R. 40 E.,	
SJ0131	sec. 22, S1/2 NE1/4 SE1/4 SE1/4	5.00
SJ0131	sec. 22, SE1/4 SE1/4 SE1/4	10.00
SJ0131	sec. 23, S1/2 NW1/4 SW1/4 SW1/4	5.00
SJ0131	sec. 23, SW1/4 SW1/4 SW1/4	10.00
	T. 40 S., R. 42 E.,	
SJ0129	sec. 34, S1/2 SW1/4	80.00
SJ0129	sec. 34, SW1/4 SE1/4	40.00
SJ0126	sec. 36, E1/2 SE1/4	80.00
SJ0126	sec. 36, E1/2 SW1/4 SE1/4	20.00
	T. 40 S., R. 43 E.,	
SJ0118	sec. 21, N1/2 NW1/4 NW1/4 SW1/4	5.00
SJ0119	sec. 29, NE1/4 NE1/4	40.00
SJ0120	sec. 29, NE1/4 SE1/4 NE1/4 NW1/4	2.50
SJ0120	sec. 29, S1/2 SE1/4 NE1/4 NW1/4	5.00
SJ0121	sec. 29, SE1/4 SE1/4 SW1/4 NW1/4	2.50
SJ0122	sec. 29, N1/2 SE1/4 SW1/4	20.00
SJ0122	sec. 29, N1/2 SW1/4 SE1/4 SW1/4	5.00
SJ0123	sec. 29, NW1/4 NW1/4 SE1/4	10.00
SJ0123	sec. 29, N1/2 SW1/4 NW1/4 SE1/4	5.00
SJ0124	sec. 30, SE1/4 NE1/4 SE1/4	10.00
SJ0125	sec. 30, E1/2 SE1/4 SW1/4 SE1/4	5.00
SJ0126	sec. 31, lot 4	34.10
SJ0128	sec. 31, N1/2 NW1/4 SE1/4 NE1/4	5.00
SJ0128	sec. 31, SW1/4 NW1/4 SE1/4 NE1/4	2.50
SJ0127	sec. 31, N1/2 NE1/4 SW1/4	20.00
SJ0127	sec. 31, SW1/4 NE1/4 SW1/4	10.00
SJ0127	sec. 31, NW1/4 NW1/4 NW1/4 SE1/4	2.50
	T. 41 S., R. 39 E.,	
SJ0109	sec. 10, S1/2 N1/2 SW1/4 NE1/4	10.00
SJ0109	sec. 10, S1/2 SW1/4 NE1/4	20.00
SJ0109	sec. 10, SW1/4 SW1/4 SE1/4 NE1/4	2.50
SJ0110	sec. 11, SW1/4 NW1/4 SW1/4	10.00
SJ0111	sec. 11, SW1/4 SW1/4 SE1/4 SW1/4	2.50
SJ0113	sec. 13, S1/2 S1/2 SW1/4 NW1/4	10.00
SJ0112	sec. 14, S1/2 SW1/4 NW1/4 NE1/4	5.00
SJ0113	sec. 14, S1/2 NW1/4 SE1/4 NE1/4	5.00
SJ0113	sec. 14, S1/2 SE1/4 NE1/4	20.00
SJ0114	sec. 14, NE1/4 NE1/4 SW1/4 NW1/4	2.50
SJ0115	sec. 15, NE1/4 NE1/4 NE1/4 NE1/4	2.50
SJ0117	sec. 22, lot 1	4.55
SJ0117	sec. 22, lot 2	4.36
SJ0117	sec. 22, lot 3	4.18
SJ0116	sec. 24, NE1/4 NW1/4 NE1/4	10.00
SJ0116	sec. 24, NE1/4 NW1/4 NW1/4 NE1/4	2.50
	T. 41 S., R. 40 E.,	
SJ0131	sec. 2, lot 5	20.00
SJ0131	sec. 2, NE1/4 NW1/4	40.00
SJ0107	sec. 9, S1/2 SE1/4 SW1/4 SE1/4	5.00
SJ0107	sec. 9, SW1/4 SW1/4 SE1/4 SE1/4	2.50
SJ0108	sec. 15, W1/2 W1/2 SW1/4 NW1/4	10.00
SJ0105	sec. 17, S1/2 S1/2 SE1/4 SW1/4	10.00
SJ0105	sec. 17, NE1/4 SE1/4 SE1/4 SW1/4	2.50
SJ0105	sec. 17, S1/2 SW1/4 SE1/4	20.00
SJ0103	sec. 18, lot 4	35.39
SJ0104	sec. 19, lot 2	35.96
SJ0106	sec. 20, lot 2	38.12
	T. 41 S., R. 42 E.,	
SJ0130	sec. 4, N1/2 SE1/4	80.00
	T. 41 S., R. 43 E.,	
SJ0132	sec. 9, S1/2 SE1/4 NE1/4	20.00
SJ0132	sec. 9, NE1/4 SE1/4	40.00
SJ0134	sec. 10, W1/2 SW1/4 NE1/4	20.00
SJ0133	sec. 10, S1/2 N1/2 NW1/4	40.00
SJ0134	sec. 10, W1/2 NE1/4 NW1/4 SE1/4	5.00
SJ0134	sec. 10, W1/2 NW1/4 SE1/4	20.00
SJ0134	sec. 10, W1/2 NW1/4 SW1/4 SE1/4	5.00
SJ0135	sec. 14, W1/2 SW1/4 SW1/4 NW1/4	5.00
SJ0135	sec. 14, N1/2 SW1/4 NW1/4	20.00
SJ0135	sec. 14, E1/2 SW1/4 SW1/4 NW1/4	5.00

Tract	Legal description	Acres
SJ0135	sec. 14, SE1/4 SW1/4 NW1/4	10.00
SJ0140	sec. 14, W1/2 W1/2 E1/2 SW1/4	20.00
SJ0136	sec. 15, S1/2 NE1/4 NE1/4	20.00
SJ0136	sec. 15, E1/2 SE1/4 NW1/4 NE1/4	5.00
SJ0446	sec. 17, SW1/4 SW1/4	40.00
SJ0137	sec. 17, S1/2SW1/4SW1/4NW1/4	1.25
SJ0137	sec. 17, SE1/4SE1/4SW1/4NW1/4	2.50
SJ0138	sec. 17, N1/2NW1/4NE1/4SW1/4	5.00
SJ0480	sec. 19, lot 5	5.82
SJ0481	sec. 19, lot 6	5.81
SJ0483	sec. 19, lot 7	5.82
SJ0445	sec. 19, lot 8	14.65
SJ0482	sec. 19, lot 10	4.26
SJ0447	sec. 20, lot 4	39.58
SJ0139	sec. 21, lot 1	41.77
Subtotal		24,316.9
TOTAL		62,061.60[3]

[1] May be encumbered by mining claims.
[2] Subject to reservation of section 24 "Federal Power Act."
[3] This figure is rounded to 62,100 for narratives and tables

Table L-5-*Increased costs of alternative utility routing to bypass Owyhee river below the Dam ACEC (east-west electric transmission corridor dog leg option).*

Design	Cost per mile	20-mile cost[1]
Single circuit 500 kV, lattice design		
construction for 50/50 terrain[2]	$581,330	$11,626,600
Administrative and corporate overheads	$197,650	$3,953,000
Operations and maintenance	$1,767	$35,340
Losses, based on 1000mW average load 60 percent LF	$12,197	$243,940
TOTAL	$792,944	$15,858,880
Double circuit 500 kV, lattice design		
Construction for 50/50 terrain[2]	$1,057,460	$21,149,200
Administrative and corporate overheads	#359,530	$7,190,600
Operations and maintenance	$3,400	$68,000
Losses, based on 1000mW average load, 60 percent LF	$16,823	$336,460
TOTAL	$1,437,213	$28,744,260

[1] Cost analysis is done on the entire 20-mile route (17 miles of route is on public land).
[2] Does not include land costs or environmental costs. Cost information for this analysis was provided at BLM request by Randall W. Melzer, BLM Team Lead, Department of Energy, Bonneville Power Administration, Vancouver, Washington, in letter dated May 6, 1997.

Appendix M

Wildland Fire Appropriate Management Response

Use of appropriate management response (AMR) on all wildland fire allows agency administrators the ability to choose from a full spectrum of fire suppression actions. Although all wildland fires must have an appropriate action taken to suppress them, not all wildfires need to be suppressed with the same level of intensity. Appropriate suppression actions, whether aggressive, high intensity or low intensity actions, will be based on preplanned analysis and executed to minimize suppression costs plus resource losses, consistent with land management objectives, including the threat to life and property.

Preplanned analysis criteria has been identified through the Phase One Fire Management Planning Process (see glossary) in which an interdisciplinary team of resource, fire, and line management representatives classified public land into the two different management categories listed as follows:

Category A

Those lands where wildland fire should be excluded, using only prescribed fire to achieve the desired resource conditions or management of the area. The AMR for these lands would be designated as full suppression. In multiple fire situations, with fires occurring within both land categories, suppression priorities would be given to those fires burning within this classification of land. When multiple fires occur within Category A, suppression priority would be based on the threat or potential threat to public safety, structures, private property, and improvements.

Criteria used to determine Category A land include:

- Protecting public safety;
- Protecting rural/urban interface;
- Threat to private land;
- Protecting capital improvements;
- Protecting administrative/recreational sites;
- Maintaining or enhancing forage;
- Minimizing loss of shrub cover;
- Minimizing increase in annual vegetation types;
- Limiting or reducing medusahead, cheatgrass, and other noxious species;
- Providing diverse perennial species;
- Protecting habitat for special status plant species;
- Protecting Federal and State lands identified under fire protection agreements.

Category B

Those lands where wildland fire could/should be used in addition to prescribed fire to meet desired resource conditions or management. Under this category of land the AMR could vary based on predetermined fire and resource criteria (see attached fire and resource criteria) for land in and adjacent to the fires location. In multiple fire situations, Category A land would, with the exception of threat to life, receive higher priority for suppression actions than would Category B lan/

While all wildland fires would receive a suppression response, that response would not always be full suppression. Theoretically, less than full suppression responses would occur only during spring early or late summer and fall months, dependant on weather conditions, or in multiple fire situations when suppression forces are not adequate to respond to all going fires. With multiple fires burning, suppression actions would occur in order of priority, with lower priority fires receiving suppression action as forces become available. All other fires receiving less than full suppression actions must meet the following fire criteria thresholds:

- Fire located within Category B land;
- Live fuel moisture in big sagebrush at 120 percent or more with 10-hour fuel stick readings of 5 percent or above or live fuels of 95 percent or above and 10-hour fuel stick reading of 8 percent or above;
- Predicted, maximum sustained wind speed of 10 mph (obtained from fire weather forecast);
- Observed and predicted fire behavior will continue to meet resource management objectives;
- No threat to public safety;
- Not a threat to private, State or other Federal land (unless those lands are under a signed mutual agreement with the landowner or agency for less than full suppression actions);
- Fires ignition is not suspected to be arson;
- Actions are in accordance with the "Northwest Geographic Area Preparedness Level 3" (this level is based on the number of fire suppression resources that are committed to ongoing fire suppression activities within the northwest area, as more resources are committed the level raises).

If any of these criteria are exceeded the AMR becomes that of full suppression, with the only exception to this occurring in a multiple fire situation where suppression actions are based on priority.

Within Category B, land resource considerations would be addressed and updated annually to reflect appropriate changes in the values to be protected. Resource criteria has been identified as to those criteria which may lead to full suppression actions and those criteria which may lead to less than full suppression actions, those criteria include but are not limited to the following.

Resource criteria which may lead to full suppression action include but are not limited to:

- Burning vegetation resources with commodity values;
- Burning within the perimeter of an area burned within the last 10 years;
- Burning within the perimeter of a fire rehabilitation area;
- Burning within given vegetation types/habitat (key winter range, big sagebrush/bitter brush, annual grasslands, shrub/annual grassland, rabbit brush/grassland, forested land, and salt desert shrub); and
- Burning more than one-third of a subwatershed in a 3-year period.

Resource criteria which may lead to less than full suppression actions include but are not limited to:

- Burning within riparian areas;
- Burning within designated ACEC/RNA areas (allow to monitor natural processes);
- Burning within a WSA;
- Burning within given vegetation types (western juniper, quaking aspen);
- Burning at 5,000 feet elevation or above (vegetation communities capable of natural rehabilitation); or
- Burning within an area that has a prescribed fire plan in place.

The authorized officer (district manager or designated representative) has the authority to modify fire and resource criteria for either category of land based on site-specific resource management objectives identified through the adaptive management process.

Appendix O

Best Management Practices

Best management practices (BMP's) are those land and resource management techniques designed to maximize beneficial results and minimize negative impacts of management actions. Interdisciplinary site-specific analysis is necessary to determine which management practices would be necessary to meet specific goals. BMP's described in this appendix are designed to assist in achieving the objectives for maintaining or improving water quality, soil productivity, and the protection of watershed resources. These guidelines will apply, where appropriate, to all use authorizations, including BLM-initiated projects. Modifications may be necessary on a site-specific basis to minimize the potential for negative impacts. Each of the following BMP guidelines is a part of the coordinated development of this plan and may be updated as new information becomes available. Applicants can suggest alternate conditions that could accomplish the same result.

BMP's are selected and implemented as necessary, based on site-specific conditions, to meet water, soil, and watershed objectives for specific management actions. This document does not provide an exhaustive list of BMP's. Additional BMP's may be identified during an interdisciplinary process when evaluating site-specific management actions. Implementation and effectiveness of BMP's need to be monitored to determine whether the practices are achieving water, soil, and watershed objectives and accomplishing the desired goals. Adjustments will be made as necessary to ensure objectives are met and as needed to conform with changes in BLM regulations, policy, direction, or new scientific information.

These BMP's are a compilation of existing policies and guidelines and commonly employed practices to minimize water quality degradation from nonpoint sources, and the loss of soil productivity, and provide guidelines for aesthetic conditions within watersheds from surface disturbing activities.

BMP's are considered one of the primary mechanisms to achieve Oregon water quality standards and reduce impacts from nonpoint source pollution. Nonpoint sources of pollution result from natural causes, human actions, and the interactions between natural events and conditions associated with human use of the land and its resources. Nonpoint source pollution is caused by diffuse sources rather than from a discharge at a specific, single location. Such pollution results in alteration of the chemical, physical, and biological integrity of water.

BMP's are defined as methods, measures or practices selected on the basis of site-specific conditions to ensure that water quality will be maintained at its highest practicable level. BMP's include, but are not limited to, structural and nonstructural controls, operations, and maintenance procedures. BMP's can be applied before, during, and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters (40 CFR 130.2(m), Environmental Protection Agency Water Quality Standards Regulation).

BMP's are identified as part of the NEPA process, with interdisciplinary involvement. Because the control of nonpoint sources of pollution is an ongoing process, continual refinement of BMP design is necessary. This process can be described in these five steps: (1) selection of design of a specific BMP; (2) application of the BMP; (3) monitoring; (4) evaluation; and (5) feedback. Data gathered through monitoring is evaluated and is used to identify changes needed in BMP design, application, or in the monitoring program.

Road Design and Maintenance

1) Design roads to minimize total disturbance, to conform with topography, and to minimize disruption of natural drainage patterns.

2) Base road design criteria and standards on road management objectives such as traffic requirements of the proposed activity and the overall transportation plan, economic analysis, safety requirements, resource objectives, and minimizing damage to the environment.

3) Locate roads on stable terrain such as ridgetops, natural benches, and flatter transitional slopes near ridges and valley bottoms and moderate sideslopes and away from slumps, slide prone areas, concave slopes, clay beds, and where rock layers dip parallel to the slope. Locate roads on well-drained soil types; avoid wet areas.

4) Construct cut and fill slopes to be approximately 3(h):1(v) or flatter where feasible. Locate roads to minimize heights of cutbanks. Avoid high, steeply sloping cutbanks in highly fractured bedrock.

5) Avoid head walls, midslope locations on steep, unstable slopes, fragile soils, seeps, old landslides, sideslopes in excess of 70 percent, and areas where the geologic bedding planes or weathering surfaces are inclined with the slope. Implement extra mitigation measures when these areas can not be avoided.

6) Construct roads for surface drainage by using outslopes, crowns, grade changes, drain dips, waterbars and/or insloping to ditches as appropriate.

7) Sloping the road base to the outside edge for surface drainage is normally recommended for local spurs or minor collector roads where low volume traffic and lower traffic speeds are anticipated. This is also recommended in situations where long intervals between maintenance will occur and where minimum excavation is wanted. Out-sloping is not recommended on steep slopes. Sloping the road base to the inside edge is an acceptable practice on roads with steep sideslopes and where the underlying soil formation is very rocky and not subject to appreciable erosion or failure.

8) Crown and ditching is recommended for arterial and collector roads where traffic volume, speed, intensity and user comfort are considerations. Recommended gradients range from 0 to 15 percent where crown and ditching may be applied, as long as adequate drainage away from the road surface and ditch lines is maintained.

9) Minimize excavation, when constructing roads, through the use of balanced earthwork, narrowing road widths, and end hauling where sideslopes are between 50 and 70 percent.

10) If possible, construct roads when soils are dry and not frozen. When soils or road surfaces become saturated to a depth of 3 inches, BLM-authorized activities should be limited or cease unless otherwise approved by the authorized officer.

11) Consider improving inadequately surfaced roads, that are to be left open to public traffic during wet weather, with gravel or pavement to minimize sediment production and maximize safety.

12) Retain vegetation on cut slopes unless it poses a safety hazard or restricts maintenance activities. Roadside brushing of vegetation should be done in a way that prevents disturbance to root systems and visual intrusions (such as avoid using excavators for brushing).

13) Retain adequate vegetation between roads and streams to filter runoff caused by roads.

14) Avoid riparian/wetland areas where feasible; locate in these areas only if the roads do not interfere with the attainment of PFC and RMO's.

15) Minimize the number of unimproved stream crossings. When a culvert or bridge is not feasible, locate drive-through (low water crossings) on stable rock portions of the drainage channel. Harden crossings with the addition of rock and gravel if necessary. Use angular rock if available.

16) Locate roads and limit activities of mechanized equipment within stream channels to minimize their influence on riparian areas. When stream crossing is necessary, design the approach and crossing perpendicular to the channel where practical. Locate the crossing where the channel is well-defined, unobstructed, and straight.

17) Avoid placing fill material in floodplain unless the material is large enough to remain in place during flood events.

18) Use drainage dips instead of culverts on roads where gradients would not present a safety issue. Locate drainage dips in such a way so water would not accumulate or where outside berms prevent drainage from the roadway. Locate and design drainage dips immediately upgrade of stream crossings and provide buffer areas and catchment basins to prevent sediment from entering the stream.

19) Construct catchment basins, brush windrows, and culverts in a way to minimize sediment transport from road surfaces to stream channels. Install culverts in natural drainage channels in a way to conform with the natural streambed gradients with outlets that discharge onto rocky or hardened protected areas.

20) Design and locate water crossing structures in natural drainage channels to accommodate adequate fish passage, provide for minimum impacts to water quality and RCA's, and capable of handling a 100-year event for runoff and floodwaters.

21) Use culverts that pass, at a minimum, a 50-year storm event and/or have a minimum diameter of 24 inches for permanent stream crossings and a minimum diameter of 18 inches for road crossdrains.

22) Replace undersized culverts and repair or replace damaged culverts and down spouts. Provide energy dissipators at culvert outlets or drainage dips.

23) Locate culverts or drainage dips in such a manner as to avoid discharge onto unstable terrain such as head walls or slumps. Provide adequate spacing to avoid accumulation of water in ditches or road surfaces. Culverts should be placed on solid ground to avoid road failures.

24) Proper sized aggregate and riprap should be used during culvert construction. Place riprap at culvert entrance to streamline water flow and reduce erosion.

25) Establish adapted vegetation on all cuts and fill immediately following road construction and maintenance.

26) Remove berms from the down slope side of roads, consistent with safety considerations.

27) Leave abandoned roads in a condition that provides adequate drainage without further maintenance. Close abandoned roads to traffic. Physically obstruct the road with gates, large berms, trenches, logs, stumps, or rock boulders as necessary to accomplish permanent closure.

28) Abandon and rehabilitate roads no longer needed. Leave these roads in a condition that provides adequate drainage. Remove culverts.

29) When plowing snow for winter use of roads, provide breaks in snow berms to allow for road drainage. Avoid plowing snow into streams. Plow snow only on existing roads.

30) Maintenance should be performed to conserve existing surface material, retain the original crowned or out-sloped self-draining cross section, prevent or remove rutting berms (except those designed for slope protection) and other irregularities that retard normal surface runoff. Avoid wasting loose ditch or surface material over the shoulder where it can cause stream sedimentation or weaken slump-prone areas. Avoid undercutting back slopes.

31) Do not disturb the toe of cut slopes while pulling ditches or grading roads. Avoid sidecasting road material into streams.

32) Grade roads only as necessary. Maintain drain dips, waterbars, road crown, in-sloping and out-sloping, as appropriate, during road maintenance.

33) Maintain roads in SMA's according to SMA guidance. Generally, retain roads within existing disturbed areas and sidecast material away from the SMA.

34) When landslides occur, save all soil and material usable for reclamation or stockpile for future reclamation needs. Avoid side casting of slide material where it can damage, overload, and saturate embankments, or flow into down-slope drainage courses. Reestablish vegetation as needed in areas where vegetation has been destroyed due to side casting.

35) Strip and stockpile topsoil ahead of construction of new roads, if feasible. Reapply soil to cut and fill slopes prior to revegetation.

36) Existing roads should be utilized whenever possible rather than constructing new road systems.

Surface-Disturbing Activities

1) Special design and reclamation measures may be required to protect scenic and natural landscape values. This may include transplanting trees and shrubs, mulching and fertilizing disturbed areas, use of low profile permanent facilities, and painting to minimize visual contrasts. Surface-disturbing activities may be moved to avoid sensitive areas or to reduce the visual effects of the proposal.

2) Above ground facilities requiring painting should be designed to blend in with the surrounding environment.

3) Disturbed areas should be contoured to blend with the natural topography. Blending is defined as reducing form, line, and color contrast associated with the surface disturbance. Disturbance in visually sensitive areas should be contoured to match the original topography, where matching is defined as reproducing the original topography and eliminating form, line, and color caused by the disturbance as much as possible.

4) Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within 6 months of the termination of operations unless otherwise approved in writing by the authorized officer.

5) Fill material should be pushed into cut areas and up over back slopes. Depressions should not be left that would trap water or form ponds.

Rights-of-way and Utility Corridors

1) Rights-of-way and utility corridors should use areas adjoining or adjacent to previously disturbed areas whenever possible, rather than traverse undisturbed communities.

2) Waterbars or dikes should be constructed on all of the rights-of-way and utility corridors, and across the full width of the disturbed area, as directed by the authorized officer.

3) Disturbed areas within road rights-of-way and utility corridors should be stabilized by vegetation practices designed to hold soil in place and minimize erosion. Vegetation cover should be reestablished to increase infiltration and provide additional protection from erosion.

4) Sediment barriers should be constructed when needed to slow runoff, allow deposition of sediment, and prevent transport from the site. Straining or filtration mechanisms may also be employed for the removal of sediment from runoff.

Forest Management

1) Design harvest units and forest health treatments to blend with natural terrain.

2) Consider clearcutting only where it is silviculturally essential to accomplish site-specific objectives. Areas with fragile watershed conditions or high scenic values should not be clearcut.

3) When soils or road surfaces become saturated to a depth of 3 inches, BLM-authorized activities, such as log yarding and hauling, should be limited or cease unless otherwise approved by the authorized officer.

4) Scatter unmerchantable material (tops, limbs, etc.) in cutting units and treatment areas, consistent with fuel loading limitations.

5) Ground yarding systems are not recommended on slopes that are of 30 percent or greater.

6) Utilize designated skid trails and haul roads, where feasible, when ground yarding timber harvest operations.

7) Locate skid trails on upper slope positions, as far as possible from surface water. Avoid skidding across drainage bottoms or creating conditions that concentrate and channelize surface flow.

8) Use directional felling, when applicable, to minimize skidding distance and locate skid trails as far as possible from sensitive areas.

9) Install waterbars and apply native seed, when available, to skid trails and landings prior to temporary seasonal closures and following harvest operations. Consider ripping or subsoiling on skid trails and abandoned haul roads to reduce compaction where soil and slope conditions permit.

10) When ground or cable yarding, logs should be fully, or at least have the lead end, suspended.

11) Locate landings away from surface water. Design landings to minimize disturbance consistent with safety and efficiency of operation.

12) Use low ground pressure grapple equipment, if possible, when piling slash.

13) Conduct forested land treatments when soil surfaces are either frozen, dry, or have adequate snowpack to minimize impacts to soil and water resources.

Fire Suppression

1) Minimize surface disturbances and avoid the use of heavy earth-moving equipment where possible, on all fire suppression and rehabilitation activities, including "mop-up," except where high value resources (including lives and property), are being protected.

2) Install waterbars and seed all constructed firelines with native or adapted nonnative species as appropriate.

3) Avoid dropping fire retardant that is detrimental to aquatic communities on streams, lakes, ponds and in riparian/wetland areas.

4) The location and construction of hand lines should result in minimal surface disturbance while effectively controlling the fire. Hand crews should locate lines to take full advantage of existing land features that represent natural fire barriers. Whenever possible, handlines should follow the contour of the slope to protect the soil, provide sufficient residual vegetation to capture and retain sediment, and maintain site productivity.

5) Suppression in riparian areas should be by hand crews when possible.

Prescribed Burning

1) To protect soil productivity, burning should be conducted if possible, under conditions when a low-intensity burn can accomplish stated objectives. Burn only when conditions of organic surface or duff layer have adequate moisture to minimize effects to the physical and chemical properties of the soil. When possible, maximize the retention of the organic surface or duff layer.

2) Slash should not be piled and burned within riparian/wetland areas. If riparian/wetland areas are within or adjacent to the prescribed burn unit, piles should be fire lined or scattered prior to burning.

3) When preparing the unit for burning, avoid piling concentrations of large logs and stumps; pile small material (3 to 8 inches diameter). Slash piles should be burned when soil and duff moisture are adequate to reduce potential damage to soil resources.

Livestock Grazing Management

Rangeland projects and improvements are constructed as a portion of adaptive management to reduce resource management conflicts and to achieve multiple use management objectives. Standard design elements and procedures for rangeland improvements are summarized in Appendix S. They have been standardized over time to mitigate impacts and will be adhered to in the construction and maintenance of rangeland projects within the planning area.

Effects of grazing by large herbivores are summarized in Appendix R. Grazing schedules are developed and adjusted through the adaptive management process on an allotment specific basis. This is to mitigate impacts to resource values and progress toward multiple-use management objectives and sustainability of desirable values.

Mining

1) Reclaim all disturbed surface areas promptly, preforming concurrent reclamation as necessary, and minimize the total amount of all surface disturbance.
2) All surface soil should be stripped prior to conducting operations, stockpiled, and reapplied during reclamation, regardless of soil quality. Minimize the length of time soil remains in stockpiles and the depth or thickness of stockpiles. When slopes on topsoil stockpiles exceed 5 percent, a berm or trench should be constructed below the stockpile to prevent sediment transport off site.

3) Strip and separate soil surface horizons where feasible and reapply in proper sequence during reclamation.

4) Locate soil stockpiles and waste rock disposal areas away from surface water to minimize off-site drainage effects.

5) Establish vegetation cover on soil stockpiles that are to be in place longer than 1 year.

6) Construct and rehabilitate temporary roads to minimize total surface disturbance, consistent with intended use.

7) Consider temporary measures such as silt fences, straw bales, or mulching to trap sediment in sensitive areas until reclaimed areas are stabilized with vegetation.

8) Reshape to the approximate original contour all areas to be permanently reclaimed, providing for proper surface drainage.

9) Leave reclaimed surfaces in a roughened condition following soil application.

10) Complete reclamation and seeding during the fall if possible.

Noxious Weed Management

1) All contractors and land-use operators moving surface-disturbing equipment in or out of weed infested areas should clean their equipment before and after use on public land.

2) Control weeds annually in areas frequently disturbed such as gravel pits, recreation sites, road sides, livestock concentration areas.

3) Consider livestock quarantine, removal, or timing limitations in weed infested areas.

4) All seed, hay, straw, mulch, or other vegetation material transported and used on public land weed-free zones for site stability, rehabilitation or project facilitation should be certified by a qualified Federal, State, or county officer as free of noxious weeds and noxious weed seed. All baled feed, pelletized feed and grain transported into weed-free zones and used to feed livestock should also be certified as free of noxious weed seed.

5) It is recommended that all vehicles, including off-road and all-terrain, traveling in or out of weed infested areas should clean their equipment before and after use on public land.

For additional controls on noxious weed management please refer to the "Northwest Area Noxious Weed Control Program" (1987), its associated "Supplemental Environmental Impact Statement" and the "Vale District Fire-Year Noxious Weed Control Program Environment Assessment" (1987) with extensions.

Developed Recreation

1) Construct recreation sites and provide appropriate sanitation facilities to minimize impacts to resource values, public health and safety, and minimize user conflicts of approved activities and access within an area as appropriate.

2) Minimize impacts to resource values or to enhance a recreational setting. Harden site and locations subject to prolonged/repetitive concentrated recreational uses with selective placement of gravel or other porous materials and allow for dust abatement, paving and engineered road construction.

3) Use public education and/or physical barriers (such as rocks, posts, vegetation) to direct or prelude uses and to minimize impacts to resource values.

4) As appropriate, employ limitations of specific activities to avoid or correct adverse impacts to resource values.

5) Employ land use ethics programs and techniques such as "Leave No Trace" and "Tread Lightly." Use outreach efforts of such programs to lessen needs to implement more stringent regulatory measures to obtain resource protection.

Appendix P

Mineral Development Scenarios

Introduction

This appendix describes scenarios for the reasonably foreseeable development of leasable, locatable, and saleable mineral commodities. The scenario for reasonably foreseeable development estimates the level and type of future mineral activity in the planning area and provides a basis for the analysis of cumulative effects. The scenario first describes the steps in developing a mineral deposit, with presentation of hypothetical exploration and mining operations. Current levels of activity are discussed in Chapter 3. Trends and assumptions affecting mineral activity are discussed in this appendix, followed by estimates for future mineral exploration and development.

Scope

The scenario for reasonably foreseeable development is based on known or inferred mineral resource capabilities and applies the conditions and assumptions discussed below. Changes in available geologic data or economic conditions would alter reasonably foreseeable development, and some deviation should be expected over time. The development scenario is limited to BLM-administered land.

Leasable Mineral Resources

Reasonably Foreseeable Development of Oil and Gas (Alternatives A– D2 and PRMP)

Future trends and assumptions: Based on the history of drilling for oil and gas and the development potential of the planning area, activity over the next 15 to 20 years is likely to be sporadic. Oil and gas activity will probably consist of the issuance of some competitive and over-the-counter leases, a few geophysical surveys, and perhaps the drilling of two or three exploratory wells.

Geophysical exploration: Geophysical exploration is conducted to determine the subsurface structure of an area and the potential for mineral resources. Three geophysical survey techniques are generally used to define subsurface characteristics through measurements of the gravitational field, magnetic field, and seismic reflections.

Gravity and magnetic field surveys—involve small, portable measuring units that are easily transported by light off-highway vehicles, such as 4-wheel drive pickup trucks and jeeps, or aircraft. Both off and on-highway travel may be necessary. Although these two survey methods can take measurements along defined lines, it is more common to have a grid of distinct measurement stations. Surface disturbance resulting from these surveys is negligible, consisting almost exclusively of soil or vegetation compaction that persists no more than a few months.

Seismic reflection surveys—are the most common of the geophysical methods, and they produce the most detailed subsurface information. Seismic surveys are conducted by sending shock waves, generated by a small explosion or by mechanically beating the ground with a thumping or vibrating platform. In the mechanical technique, four large trucks are usually used, each equipped with pads about 4-feet square. The pads are lowered to the ground, and the vibrations are electronically triggered from the recording truck. Once information is recorded, the trucks move forward a short distance and the process is repeated. Surface disturbance includes flattening of vegetation and compaction of soils.

The explosive method —requires that small charges be detonated on the surface or in a shallow drill hole. Holes for the charges are drilled using truck-mounted or portable air drills. In general, this method uses 4 to 12 holes per mile of line, and a 5 to 50-pound explosive charge is placed in each hole, covered, and detonated. The shock wave created is recorded by geophones placed in a line on the surface. In rugged terrain, a portable drill carried by helicopter can sometimes be used. The vehicles used for a drilling program may include heavy truck-mounted drill rigs, track-mounted drill rigs, water trucks, a computer recording truck, and a light pickup.

Existing roads and trails are used where possible, but off-road travel is necessary in some cases. Several trips per day are made along a seismograph line, usually resulting in a well-defined two-track trail. The surface charge method uses 1 to 5-pound charges attached to wooden laths 3 to 8 feet above the ground. Placing charges lower than 6 feet usually results in destruction of vegetation, whereas placing the charges higher, or on the surface of deep snow, results in little visible surface disturbance.

It is expected that three notices of intent, involving seismic reflection and gravity/magnetic field surveys, would be filed under Alternatives A through D2 and the Proposed RMP during the life of this plan. The total expected surface disturbance would be approximately 1 acre.

Drilling phase: After an application to drill is approved, the operator may begin construction in accordance with lease stipulations and conditions of approval of the drilling permit. When a site requires construction of an access road, the shortest feasible route is usually selected to reduce the haul distance and construction costs. Environmental factors or a landowner's wishes may dictate a longer route in some cases. Drilling in the planning area is expected to be done using existing roads and construction of only short (approximately 0.5 mile) roads to access drill site locations.

Based on the history of oil and gas exploration in the planning area, it is projected that two or three exploratory wildcat wells would be drilled on BLM-administered land in the planning area during the life of this plan. The estimated success rate would be no greater than 10 percent, based on the average wildcat success rate. Drilling is expected to occur in areas of moderate oil and gas potential, the highest level of potential in the planning area. There is an estimated 2 percent probability that a field will be discovered during the life of this plan, with a strong likelihood that the discovery would be natural gas because most of the occurrences in the planning area are gas.

During the first phase of drilling, the operator would move construction equipment over existing maintained roads to the point where the access road begins. Less than 0.5 mile of moderate duty access road with a gravel surface 18 or 20 feet wide is expected for construction. With ditches, cuts, and fill, the total width of surface disturbance would average 40 feet. The second part of the drilling phase is the construction of the drill pad (platform). The likely duration of well development, testing, and abandonment is 3 or 4 months per site. The total disturbance for each exploratory well and any new road is estimated to be less than 5 acres. The total surface disturbance caused by exploratory drilling over the life of this plan is expected to be about 13 acres.

Field development and production: Exploratory drilling is not expected to lead to the development of a producing field in the planning area. Nonetheless, the following scenario describes the operations and effects associated with field development. Any oil and gas deposits found in the planning area will probably be too small to be economically developed. The minimum size considered economically feasible would be a field containing reserves of 50-60 billion cubic feet of gas with a productive life of 10 years. The total area of the field would be 800 acres, with a likely well spacing of 160 acres. The field would require four development wells in addition to the discovery well. Each development well would require 0.25 mile of road. Development well access roads would have a surface of crushed aggregate or gravel and would be approximately 20 feet wide (total disturbed width of 40 feet). Gas produced would be carried by pipelines that could be linked to existing and proposed gas transmission lines in the planning area. Average pipeline length is estimated to be 40–50 miles. The width of the surface disturbance for pipelines would average 30 feet. Any oil produced would be trucked to refineries outside of Oregon. Established companies would service the wells.

The total surface disturbance would be 8 acres for well pads, 5 acres for roads, 13 acres for field development; and 725 acres for pipelines (145 acres/well site). The total surface disturbance caused by exploration and development would be 761 acres.

Plugging and abandonment: Wells that are completed as dry holes are plugged according to a plan designed for the condition of each well. Plugging involves placing cement plugs at strategic locations in the hole. Drilling mud is used as a spacer between the plugs to prevent communication between fluid-bearing zones. The drill casing is cut off at least 3 feet below ground level and capped by welding a steel plate on the casing stub. After plugging, all equipment and debris would be removed and the site restored as near as reasonably possible to its original condition. It is projected that one exploratory well that may be drilled would be plugged and abandoned.

Reasonably Foreseeable Development of Geothermal Resources (Alternatives A–D2 and PRMP)

Future trends and assumptions: Because environmental protection and enhancement are major concerns in the Pacific Northwest, sources of energy with a small environmental impact are becoming increasingly important. The energy surplus in the region is expected to disappear by the end of the 20th century. The abundant geothermal energy resources thought to exist in the Northwest are essentially undeveloped, especially in the planning area. With recent interest in geothermal resources expressed by some governmental entities, such as the Bonneville Power Administration (BPA), geothermal exploration and possibly development will probably continue in the planning area.

Geophysical/geochemical exploration: As with oil and gas, geothermal/geophysical operations can take place on leased or unleased public land. The operator must comply with all terms and conditions of permits, NEPA, regulations, and other requirements, including reclamation, prescribed by the authorized officer. Monitoring for compliance with these requirements would be done during operations and upon their completion.

In addition to geophysical methods discussed in the previous section on oil and gas, the following exploration techniques are often employed in geothermal prospecting:

> ***Microseismic***: Small seismometers buried at a shallow depth (hand-dug holes) transmit signals from naturally occurring, extremely minor seismic activity (microearthquakes) to an amplifier on the surface. Stations are located away from roads to avoid the effects of traffic. These units are often backpacked into areas inaccessible to vehicles.
>
> ***Resistivity***: Induced polarization techniques are used to measure the resistance of subsurface rocks to the passage of an electric current. A vehicle-mounted transmitter sends pulses of electric current into the ground through two widely spaced electrodes (usually about 2 miles apart). The behavior of these electrical pulses as they travel through underlying rocks is recorded by small devices that receive the current at different locations. The electrodes are either short rods (2–3 feet long) driven into the ground or aluminum foil shallowly buried over an area of several square feet. Two or

three small trucks transport a crew of three to five people to transmitting and receiving sites.

Telluric: A string of receivers record the variations in the natural electric currents in the earth. No transmitter is required. Small trucks are used to transport the crew and equipment.

Radiometric: Radioactive emissions (generally radon gas) associated with geothermal resources are measured using a hand-held scintillometer, often at hot spring locations. Another method involves placing plastic cups containing small detector strips sensitive to alpha radiation either on the surface or in shallow hand-dug holes. If holes are dug, they are covered, and the cups are left in place for 3 to 4 weeks. At the end of the sampling period, the cups are retrieved and all holes are backfilled. These surveys can be conducted by walking to the sites or with the aid of light vehicles.

Geochemical surveys: Geochemical surveys are usually conducted at hot springs by taking water samples directly from the spring. Mercury associated with geothermal resources is often sampled using hand tools. These surveys can be conducted by walking to the sites or with the aid of light vehicles.

Temperature gradient drill hole surveys: Temperature gradient holes are used to determine the rate of change of temperature with respect to depth. Temperature gradient holes usually vary in diameter from about 3.5 to 4.5 inches, and from a few hundred feet to 5,000 feet in depth. They are drilled using rotary or coring methods. Approximately 0.1 to 0.25 acre/drill hole would be disturbed. A typical drill site could contain a drill rig (most likely truck-mounted), water tank(s), fuel tank, supply trailer, and a small trailer for the workers. Drilling mud and fluids would be contained in earthern pits or steel tanks. Water for drilling would be hauled in water trucks, or if suitable water sources are close, could be piped directly to the site. Water consumption could range from about 2,000 to 6,000 gallons/day, with as much as 20,000 gallons/day under extreme lost circulation conditions.

Other equipment that could be used includes large flatbed trucks to haul drill rod, casing, and other drilling supplies; in some cases special cementing and bulk cement trucks; and two small vehicles for transporting workers. In most cases, existing roads would be used. It is likely that short spur trails (usually less than 500 yards) would be bladed for less than 10 percent of these holes. All holes would be plugged and abandoned to protect both surface and subsurface resources, including aquifers, and reclamation of disturbed areas would be required, unless some benefit to the public could be gained (for example, a water well or camping area).

Depending upon the location and proposed depth of the drill hole, detailed plans of operation that cover drilling methods, casing and cementing programs, well control, and plugging and abandonment could be required. Based upon past geothermal exploration in Oregon and a projected increase in power demand in the Northwest by the end of the century, it is expected that 6 notices of intent for surface geophysical surveys and 5 notices of intent to drill 30 temperature gradient holes would be filed under Alternatives A–D2 and PRMP during the life of this plan. These notices of intent would most likely be filed in areas of high potential for geothermal resources. Total surface disturbance resulting from geophysical surveys over the life of the plan is expected to be about 0.5 acre, and disturbance resulting from temperature gradient holes is expected to be about 5.5 acres.

Drilling and testing: Drilling to detect, test, develop, produce, or inject geothermal resources can be done only on land covered by a geothermal lease.

A typical geothermal well drilling operation would require 2–4 acres for a well pad, including reserve pit, and 0.5 mile of moderate duty access road with a surface 18 to 20 feet wide (total disturbed width, with ditches, cuts, and fills, of 40 feet). Existing roads would be used whenever possible. Total surface disturbance for each well and any new road is expected to be less than 6 acres. In some cases, more than one production well could be drilled from one pad. Well spacing would be determined by the authorized officer after considering topography, reservoir characteristics, the optimum number of wells for proposed use, protection of correlative rights, potential for well interference, interference with the multiple uses of the land, and protection of the surface and subsurface environment. There would be close coordination with the State of Oregon. The expected duration of well development, testing, and abandonment (if dry) would be 6 months. It is estimated that eight exploratory wells would be drilled under Alternatives A–D2 and the Proposed RMP during the life of the plan, resulting in a total surface disturbance of 34 acres.

Plugging and abandonment: Before abandonment, the operator would be required to plug the hole to prevent contamination of aquifers and any effects to subsurface and surface resources. Cement plugs would be placed at strategic locations in the hole using the same techniques as for exploratory oil and gas wells. Any new roads not needed for other purposes would be reclaimed.

Geothermal power plant development: It is projected that one power plant generating 25 megawatts of electricity (gross) may be constructed within an area of high potential for geothermal resources under Alternatives A–D2 and PRMP during the life of the plan and employing an estimated 30 people. It is expected that the developed geothermal power plant would be water-dominated and that the geothermal power conversion system would either be single or double flash, or binary cycle. Before geothermal development could occur, site-specific baseline studies and environmental analyses, with public involvement, would be done. The scenario below describes the level of disturbance that would most likely occur from the development of a 25-megawatt power plant.

Five to seven production wells and one or two injection wells would be drilled. Access would be provided by existing roads and new, short roads (0.5–1 mile) 18 to 20 feet wide (up to 40 feet total disturbed width). Surface disturbance from well pad and road construction would probably range from 2 to 6 acres per well. The power plant, including separators, energy converters, turbines, generators, condensers, cooling towers, and switchyard, would cover an estimated 10 to 15 acres. Pipelines and power lines would disturb an additional 3 to 6 acres. If a water cooling system is employed, one to three water wells, requiring approximately 0.25 acre per well, would be drilled, unless the cooling water was obtained from the geothermal steam condensate. Depending upon the location, terrain, geothermal reservoir characteristics, and type of generating facility, the total surface disturbance would probably range from 25 to 75 acres, most likely about 50 acres. After construction, approximately one-third to one-half of the disturbed area would be revegetated. The remaining disturbed area would be reclaimed before abandonment.

Direct use of geothermal energy: Low and moderate-temperature (300 to 500 °F) geothermal resources may have direct applications, including space heating and cooling of residences and businesses; applications in agriculture and industry; and recreational and therapeutic bathing. Depending on the type of use and magnitude of operation, surface disturbance could range from a few acres for a well and greenhouse or food processing facility, to tens of acres for larger agricultural or aquacultural developments. Although geothermal resources are found throughout the planning area, the small, somewhat isolated population makes any direct use of geothermal energy on public land unlikely.

Locatable Mineral Resources

Reasonably Foreseeable Development Scenarios Alternatives A–D2 and PRMP)

The major commodities of interest over the next 15 to 20 years will probably be gold/silver, bentonite, zeolite, and diatomite. This assessment is based on market conditions (especially for precious metals) and the favorable geologic environment for mineral occurrences. Reclamation science will continue to advance due to experience and research. More detailed design will be required for the reclamation of mined land in the future. This will likely increase reclamation costs but should also increase long-term reclamation success.

The economics of mining in the planning area will be driven by the relationship between production costs and the market price of the commodity. Whereas production costs can be controlled, or anticipated through management and technology, the price of a commodity is difficult to predict over time. The overall profitability of an operation—and hence the level of activity at the prospecting, exploration, and mining stages—for development of ore bodies is closely related to the price of the mineral commodity.

Over the next 15 to 20 years, it is expected that five mines may be developed in the planning area: one open-pit gold mine using chemical heap leaching, at least in part; one underground gold mine; and one mine each of bentonite, zeolite, and diatomite.

Background on the Development of a Locatable Minerals Mine

Typically, the development of a mine goes through five stages, with each stage using progressively more sophisticated (and more expensive) techniques over a successively smaller area to identify, develop, and produce an economic mineral deposit. The full sequence of developing a mineral project involves reconnaissance, prospecting, exploration, economic evaluation, and development.

Reconnaissance: Reconnaissance is the first stage in exploring for a mineral deposit. This involves an initial literature search for the area of interest using available references, such as publications, reports, maps, and aerial photographs. Because the study area is usually large, varying from hundreds to thousands of square miles, this stage normally involves large-scale mapping, regional geochemical and/or geophysical studies, and remote sensing with aerial or satellite imagery. These studies are generally undertaken with minimal surface disturbance, which usually consists of stream sediment, soil, or rock sampling. Minor off-highway vehicle use may be required.

Prospecting: If reconnaissance identifies anomalous geochemical or geophysical readings, rare or unusual geological features, evidence of mineralization, or a historical reference to mineral occurrence, a prospecting area of interest is identified. This area could range from a single square mile to an entire mountain range of several hundred square miles.

Activity to locate a mineral prospect includes more detailed mapping, sampling, and geochemical and geophysical study programs. This is the time when property acquisition efforts usually begin and most mining claims are located to secure ground while trying to make a mineral discovery. Surface-disturbing activities associated with prospecting include more intense soil and rock chip sampling, using mostly hand tools; frequent off-highway vehicle use; and placement and maintenance of mining claim monuments. This activity is usually considered casual use (43 CFR 3809.1-2) and does not require BLM notification or approval.

Exploration: Upon location of a sufficiently anomalous mineral occurrence or favorable occurrence indicator, a mineral prospect is established and subjected to more intense evaluation through exploration techniques. Activities during exploration include those used during prospecting, but at a more intense level and in a small area. In addition, road construction, trenching, and drilling take place. In the later stages of exploration, an exploratory adit or shaft may be driven. If the prospect already has underground workings, these may be sampled, drilled, or extended. Exploration activities use mechanized earth-moving equipment, drill rigs, etc., and may involve the use of explosives.

Typical exploration projects in the planning area could include in-stream dredging with portable suction dredges; exploratory drilling, which could include construction of new roads; use of explosives to sample rock outcroppings; and excavation of test pits. If the exploration project disturbs 5 acres or less, it is conducted under a notice (43 CFR 3809.1-3) which requires the operator to notify the BLM at least 15 days prior to beginning the activity. A copy of each notice is sent to the Reclamation Branch of the Oregon DOGAMI for review. If a project disturbs more than 5 acres, it is conducted under a plan of operations (43 CFR 3809.1-4) and requires NEPA compliance prior to approval.

Economic evaluation: If an exploration project discovers a potentially economic deposit, activity would intensify to obtain detailed knowledge of the deposit (such as ore grade and deposit size), possible mining methods, and mineral processing requirements. This would involve applying all the previously used exploration tools in a more intense effort. Once enough information is obtained, a feasibility study would be made to decide whether to proceed with mine development and what mining and ore processing methods would be used.

Mine development: Once the decision to develop a property has been made, the mine permitting process begins. Upon approval, work begins on development of the mine infrastructure. This includes constructing the mill, offices, and laboratory; driving development workings if the property is to be an underground mine, or prestripping if it is to be an open-pit mine; building access or haul roads; and placing utility services. Evaluations of ore reserves may be refined at this time.

Once enough facilities are in place, production begins. Satellite exploration efforts may be conducted simultaneously to expand the mine's reserve base and extend the project life. The property is reclaimed concurrently with the mining operation or upon its completion. Often uneconomic resources remain unmined and the property dormant until changes in commodity prices or production technology makes these resources economically feasible to mine.

Activities on these lands include actual mining, ore processing, tailings disposal, waste rock placement, solution processing, metal refining, and placement of support facilities, such as repair shops, laboratories, and offices. Such activities require the use of heavy earth-moving equipment and explosives for mining and materials handling, exploration equipment for refining the ore reserve base, hazardous or dangerous reagents for processing requirements, and other equipment for general construction.

The size of mines varies greatly, and not all mines require all of the previously mentioned facilities and equipment. The amount of land involved can range from only a few acres to several hundred, with most projects disturbing 5 acres or less and requiring a notice pursuant to 43 CFR 3809.1-3. Projects disturbing more than 5 acres require an approved plan of operations pursuant to 43 CFR 3809.1-4.

Reasonably Foreseeable Development

Gold/Silver

Exploration: Based on mineral exploration activity over the past 10 years and known occurrences in the planning area of both hot springs and porphyry gold, a substantial amount of exploration for gold is expected to take place during the life of this plan. Depending on the market for gold, up to 50 exploration projects for hot springs or porphyry gold and up to 10 exploration projects for placer gold are expected over the next 15 to 20 years in areas of moderate to high potential for gold/silver. A typical hot springs/porphyry exploration project would involve six drill holes and approximately 0.5 mile of new road 12 feet wide (total disturbed width of 20 feet) for each drill hole, resulting in 4.2 acres of disturbance/project, or 210 acres of total disturbance. A typical placer exploration project would use either an instream suction dredge, which would produce negligible surface disturbance, or a backhoe to dig up to five small trenches, assumed to be 8 feet wide by 10 feet long by 15 feet deep. Surface disturbance would be about 0.01 acre/project, or 0.05 acre of total disturbance.

Economic evaluation/mine development: Exploration activity is expected to result in the discovery of seven economically mineable gold deposits: 5 small placers, employing about 10 people; 1 open-pit deposit, employing about 170 people; and 1 underground deposit, employing about 50 people. All deposits would be located in areas of high potential for gold/silver. The placer deposits would be small, less than 100,000 yards of ore each, and would necessitate use of trommels, sluice boxes, or other small placering equipment, resulting in about 4 acres of disturbance/operation. Total surface disturbance would be 20 acres.

The open-pit mine is expected to contain between 10 and 90 million tons of ore, with a probable size of 15 million tons, averaging 0.06 troy ounces of gold per ton. Detailed exploration and feasibility studies would involve the construction of about 30 miles of road 12 feet wide (total disturbed width of 20 feet with ditches, cuts, and fills), and 300 drill sites, for a total disturbance of 75 acres. Development of the deposit would involve creation of an open pit, 2,100 feet in diameter and 800 feet deep; a mill complex; a cyanide heap leach pad; a tailings disposal facility; a waste disposal facility; approximately 5 miles of internal gravelled haul road 90 feet wide with a total disturbance of 100 feet; and 15 miles of all-weather access road 20 feet wide (total disturbed width of 36 feet). Surface disturbance would cover 85 acres for the pit, 40 acres for the mill complex, 65 acres for the heap leach pad, 140 acres for the tailings disposal facilities, 260 acres for the waste disposal facilities, 60 acres for internal haul roads, and 65 acres for access roads. Total surface disturbance caused by this project would be 715 acres.

The underground mine is expected to contain between 100,000 and 3 million tons of ore, with a probable size of 400,000 tons, averaging 0.5 troy ounces of gold per ton. Detailed exploration and feasibility studies would involve the construction of approximately 1 mile of road 12 feet wide (total disturbed width of 20 feet), 100 drill sites, and an adit (8 feet high by 12 feet wide by 300 feet long), for a total disturbance of 7 acres. Development of the deposit would involve underground workings 1,000 feet long by 50 feet wide by 250 feet deep; a mill complex; tailings disposal facility; waste disposal facility; 1 mile of haul road 30 feet wide (total disturbed width of 48 feet); and 20 miles of access road 20 feet wide (total disturbed width of 36 feet). Disturbance would cover 5 acres for the surface mine workings, 10 acres for the mill complex, 20 acres for tailings disposal facilities, 25 acres for waste disposal facilities, 3 acres for haul roads, and 85 acres of access road. Total disturbance caused by this project would be 148 acres.

Industrial Minerals

Exploration: Based on mineral exploration activity over the past 10 years and known occurrences in the planning area, a moderate amount of exploration for industrial minerals—mainly bentonite, zeolite, and diatomite—is expected during the life of this plan. Depending on market conditions, up to nine projects are expected: four for bentonite, two for zeolite, and three for diatomite. Exploration for these commodities is essentially the same, consisting of auger holes or trenching and road construction. An average project would involve up to 10 auger holes; 5 trenches 20–25 feet wide, 60–125 feet long, and 15–25 feet deep; and 1,000 feet of road 12 feet wide (total disturbed width of 20 feet), for a disturbance of 0.8 to 1 acre/project. Total disturbance would be about 9 acres.

Economic evaluation/mine development: Exploration activity is expected to result in the discovery of three economically mineable deposits, one each of bentonite, employing about 16 people; zeolite, employing about 3 people; and diatomite, employing about 52 people. The following scenarios are based on mine models developed by the U.S. Bureau of Mines in its "Mineral Resource Assessment for the BLM Malheur-Jordan Resource Areas, Oregon" (Open File Report 1994).

The bentonite deposit is expected to contain between 80,000 and 250,000 tons of ore, most probably about 150,000 tons, with an assumed moisture content of 31 percent. Development of the deposit would involve an open pit approximately 500 feet long by 300 feet wide by 45 feet deep, with a bentonite bed 20 feet thick; a mill complex, assumed to be 25 miles off-site on public land; a drying stockpile near the pit; 3,000 feet of haul road 20 feet wide (total disturbed width of 36 feet); and 10 miles of access road 20 feet wide (total disturbed width of 36 feet). Surface disturbance would be 3.5 acres for the pit, 2 acres for the stockpile, 2.5 acres for the haul road, 44 acres for the access road, and 10 acres for the mill. The total disturbance would be about 62 acres.

The zeolite deposit is expected to contain between 50,000 and 120,000 tons of ore, most probably about 85,000 tons, with an assumed moisture content of 25 percent. Development of the deposit would involve an open pit approximately 1,000 feet long by 130 feet wide by 30 feet deep, with a zeolite bed 20 feet thick; a mill complex, assumed to be on public land 15 miles off-site and adjacent to a paved road; a stockpile near the pit; 100 feet of haul road 20 feet wide (total disturbed width of 36 feet); and 10 miles of access road 20 feet wide (total disturbed width of 36 feet). Surface disturbance resulting from this mine would be 3 acres for the pit, 1 acre for the stockpile, 0.1 acre for the haul road, 44 acres for the access road, and 5 acres for the mill. Total disturbance would be 53.1 acres.

The diatomite deposit is expected to contain between 600,000 and 2 million tons of ore, most probably about 1 million tons, with an assumed moisture content of 55 percent. Development of the deposit would involve an open pit approximately 1,850 feet long by 730 feet wide by 75 feet deep, with a diatomite bed 44 feet thick; a mill complex, assumed to be on public land 20 miles off-site and adjacent to a paved road; a stockpile near the pit; 3,500 feet of haul road 32 feet wide (total disturbed width of 48 feet); and 10 miles of access road 20 feet wide (total disturbed width of 36 feet). Surface disturbance resulting from this mine would be 30 acres for the pit, 5 acres for the stockpile, 4 acres for the haul road, 44 acres for the access road, and 25 acres for the mill. Total disturbance would be 108 acres.

Saleable Mineral Resources

Reasonably Foreseeable Development Scenarios (Alternatives A–D2 and PRMP)

The major use of saleable minerals (primarily sand and gravel and crushed/broken rock) would continue to be for road construction and maintenance by the Oregon Department of Transportation (ODOT) and Malheur/Harney County road districts. Most of this activity would be routine seasonal maintenance on county roads, although several major projects to upgrade/realign State or Federal highways are expected, which would result in a moderate increase in demand for the materials. Because the population of the area is expected to increase by about 14,000 over the life of this plan, it is likely that public demand for saleable minerals will increase slightly over current levels, with the highest demand for decorative stone.

Existing sources of material, including quarries, pits, and surface collecting areas, would handle some of the increased demand. Many of the sites, however, have a small reserve base and could be depleted in a few years. Consequently, up to 30 new sources of material—10 sand and gravel pits, 15 rock quarries, and 5 collecting areas for decorative stone—may need to be developed during the next 15 to 20 years:

Background on the Development of Saleable Mineral Deposits

Development of a saleable mineral deposit goes through a sequence similar to that for locatable minerals and includes reconnaissance, prospecting, exploration (sampling and testing), and development. Unlike the process for locatable minerals, however, written approval (such as a permit) must be obtained from the BLM and the material must be purchased by the operator (in the case of a private citizen or commercial operator) before the deposit can be developed, as required by the 1947 "Materials Act" as amended (30 U.S.C. 601 et seq.). The act also grants the Federal government discretionary authority to deny permission to develop a deposit if the damage to public land or resources would outweigh the economic benefits of development.

Reconnaissance and prospecting for saleable minerals involves a literature search, field examination, geologic mapping (if necessary), and surface sampling. Surface disturbance is usually negligible. Exploration is usually confined to a small area and generally involves drilling or core drilling to determine whether the material meets construction standards. Because exploration is normally limited to areas with good access to major roads, little or no road construction is involved. A typical operation usually involves a number of small trenches or core holes and would disturb less than 0.01 acre/site. Mine development normally involves a pit or quarry, space for processing (crusher, stockpile, and occasionally an asphalt plant), and a staging area for trucks (loading and a turnaround area). Disturbance normally covers about 2 to 3 acres/project.

Reasonably Foreseeable Development

Exploration

During the next 15 to 20 years, up to 60 exploration projects are expected within the planning area in areas of known or suspected occurrences of mineral materials. Approximately 20 projects may be conducted for sand and gravel, 30 for rock aggregate (crushable or naturally broken material), and 5 for decorative rock.

A typical sand and gravel operation would involve up to five trenches, perhaps 8 by 10 feet and up to 20 feet deep, disturbing about 100 square feet per trench, or about 0.01 acre/project; total disturbance would be approximately 0.25 acre. A typical rock aggregate exploration project would involve up to eight core holes, disturbing about 0.01 acre/hole, or 0.1 acre/project; total disturbance would be about 3 acres. A typical decorative rock exploration project would use no mechanized equipment and would be limited to surface sampling, essentially identical to a prospecting project; surface disturbance would be negligible.

Development

Sand and gravel: During the life of the plan, it is expected that 10 new sand and gravel deposits with good quality material will be developed in easily accessible areas (such as within a few miles of major roads). Site-specific assessments required by NEPA, and inventories of cultural resources and threatened and endangered species, would be conducted prior to development. Existing pits would continue to be used as much as possible, with up to 20 percent (perhaps eight pits) closed due to depletion. A typical development of a sand and gravel deposit would contain a pit, stockpile area, processing area (crusher, washer, screener, conveyor, and perhaps asphalt plant), truck loading and turnaround area, and about 0.5 mile of new road 20 feet wide (36 feet total disturbed width). Disturbance for each project would be 2 acres for the pit, processing, and gravel and waste stockpile and 2 acres for the access road, or approximately 4 acres/project. Total disturbance would be 40 acres.

Rock aggregate: During the life of this plan, it is expected that 15 new deposits of good quality material will be developed in easily accessible areas (such as within a few miles of major roads). When the State Highway Department needs additional sources of material for major projects, highway material rights-of-way will be granted under title 23 of the "Federal Highway Act" for an estimated eight deposits adjacent to major highways.

Like sand and gravel, rock aggregate deposits would require site-specific NEPA assessments and inventories of cultural resources and threatened and endangered species prior to development. Existing pits would continue to be used as much as possible. Up to 25 percent (seven pits) will probably be closed due to depletion and then reclaimed.

A typical rock aggregate quarry would be essentially the same as a sand and gravel operation and would contain a pit, stockpile area, truck turnaround and loading area, processing area (crusher, screener, washer, conveyor, asphalt plant, etc.), and about 2,500 feet of new access road 20 feet wide (36 feet total disturbed width). Disturbance would cover 2 acres for the quarry operations and 2 acres for the access road, or 4 acres per project. Total disturbance would be 60 acres.

Decorative stone: A population increase of about 14,000 over the next 15 to 20 years will result in a moderate increase in demand for decorative material. It is expected that five new collecting sites would be designated to meet the increase in demand. These sites would be scattered throughout the planning area and would generally be reached by existing roads. Site-specific NEPA assessments and inventories for cultural resources and threatened and endangered species would be required prior to designation.

Extraction of the material would be by surface methods only, such as loading onto pickup or flatbed trucks or pallets, by hand or by rubber-tired front-end loaders. Surface disturbance resulting from these operations would be negligible.

Appendix Q

Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington

Introduction

These Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington (S&G's) were developed in consultation with resource advisory councils and provincial advisory committees, tribes, and others. These standards and guidelines meet the requirements and intent of 43 CFR, Subpart 4180, Rangeland Health, and are to be used as presented, in their entirety. These standards and guidelines are intended to provide a clear statement of agency policy and direction for those who use public land for livestock grazing, and for those who are responsible for their management and accountable for their condition. Nothing in this document should be interpreted as an abrogation of Federal trust responsibilities in protection of treaty rights of Indian tribes or any other statutory responsibilities including, but not limited to, the TGA, CWA, and ESA.

Fundamentals of Rangeland Health

The objectives of the rangeland health regulations referred to above are: "to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions . . . and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands."

To help meet these objectives, the regulations on rangeland health identify fundamental principles providing direction to the states, districts, and on-the-ground public land managers and users in the management and use of rangeland ecosystems.

A hierarchy, or order, of ecological function and process exists within each ecosystem. The rangeland ecosystem consists of four primary, interactive components: a physical component, a biological component, a social component, and an economic component. This perspective implies that the physical function of an ecosystem supports the biological health, diversity and productivity of that system. In turn, the interaction of the physical and biological components of the ecosystem provides the basic needs of society and supports economic use and potential.

The fundamentals of rangeland health stated in 43 CFR 4180 are:

1) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity and the timing and duration of flow.

2) Ecological processes, including the hydrologic cycle, nutrient cycle and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

3) Water quality complies with state water quality standards and achieves, or is making significant progress toward achieving, established BLM objectives such as meeting wildlife needs.

4) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal proposed, Category 1 and 2 Federal candidate and other special status species.

The fundamentals of rangeland health combine the basic precepts of physical function and biological health with elements of law relating to water quality, and plant and animal populations and communities. They provide direction in the development and implementation of the standards for rangeland health.

Standards for Rangeland Health

The standards for rangeland health (standards), based on the above fundamentals, are expressions of the physical and biological condition or degree of function necessary to sustain healthy rangeland ecosystems. Although the focus of these standards is on domestic livestock grazing on BLM-administered land, on-the-ground decisions must consider the effects and impacts of all uses.

Standards that address the physical components of rangeland ecosystems focus on the roles and interactions of geology and landform, soil, climate, and water as they govern watershed function and soil stability. The biological components addressed in the standards focus on the roles and interactions of plants, animals, and microbes (producers, consumers, and decomposers), and their habitats in the ecosystem. The biological component of rangeland ecosystems is supported by physical function of the system, and it is recognized that biological activity also influences and supports many of the ecosystem's physical functions.

Guidance contained in 43 CFR 4180 of the regulations directs management toward the maintenance or restoration of the physical function and biological health of rangeland ecosystems. Focusing on the basic ecological health and function of rangelands is expected to provide for the maintenance, enhancement, or creation of future social and economic options.

The standards are based on the ecological potential and capability of each site. In assessing a site's condition or degree of function, it must be understood that the evaluation compares each site to its own potential or capability. Potential and capability are defined as follows:

Potential – the highest level of condition or degree of function a site can attain given no political, social or economic constraints.

Capability – the highest level of condition or degree of function a site can attain given certain political, social or economic constraints. For example, these constraints might include riparian areas permanently occupied by a highway or railroad bed that prevent the stream's full access to its original floodplain. If such constraints are removed, the site may be able to move toward its potential.

In designing and implementing management strategies to meet the standards of rangeland health, the potential of the site must be identified, and any constraints recognized, in order that plan goals and objectives are realistic and physically and economically achievable.

Standards and Guidelines in Relation to the Planning Process

The standards apply to the goals of land use plans, activity plans, and project plans (AMP's), annual operating plans, habitat management plans, etc. They establish the physical and biological conditions or degree of function toward which management of publicly-owned rangeland is to be directed. In the development of a plan, direction provided by the standards and the social and economic needs expressed by local communities and individuals are brought together in formulating the goal(s) of that plan.

When the standards and the social and economic goals of the planning participants are woven together in the plan goal(s), the quantifiable, time-specific objective(s) of the plan are then developed. Objectives describe and quantify the desired future conditions to be achieved within a specified timeframe. Each plan objective should address the physical, biological, social, and economic elements identified in the plan goal.

Standards apply to all ecological sites and landforms on public rangelands throughout Oregon and Washington. The standards require site-specific information for full on-the-ground usability. For each standard, a set of indicators is identified for use in tailoring the standards to site-specific situations. These indicators are used for rangeland ecosystem assessments and monitoring and for developing terms and conditions for permits and leases that achieve the plan goal.

Guidelines for livestock grazing management offer guidance in achieving the plan goal and objectives. The guidelines outline practices, methods, techniques and considerations used to ensure that progress is achieved in a way, and at a rate, that meets the plan goal and objectives.

Indicators of Rangeland Health

The condition or degree of function of a site, in relation to the standards and its trend toward or away from any standard, is determined through the use of reliable and scientifically sound indicators. The consistent application of such indicators can provide an objective view of the condition and trend of a site when used by trained observers.

For example, the amount and distribution of ground cover can be used to indicate that infiltration at the soil surface can take place as described in the standard relating to upland watershed function. In applying this indicator, the specific levels of plant cover necessary to support infiltration in a particular soil should be identified using currently available information from reference areas, if they exist; from technical sources like soil survey reports, ecological site inventories, and ecological site descriptions, or from other existing reference materials. Reference areas are land that best represent the potential of a specific ecological site in both physical function and biological health. In many instances potential reference areas are identified in ecological site descriptions and are referred to as "type locations." In the absence of suitable reference areas, the selection of indicators to be used in measuring or judging condition or function should be made by an interdisciplinary team of experienced professionals and other trained individuals.

Not all indicators identified for each standard are expected to be employed in every situation. Criteria for selecting appropriate indicators and methods of measurement and observation include, but are not limited to (1) the relationship between the attribute(s) being measured or observed and the desired outcome; (2) the relationship between the activity (such as livestock grazing) and the attribute(s) being measured or observed; and (3) funds and workforce available to conduct the measurements or observations.

Assessments and Monitoring

The standards are the basis for assessing and monitoring rangeland condition and trend. Carrying out well-designed assessment and monitoring is critical to restoring or maintaining healthy rangelands and determining trends and conditions.

Assessments are a cursory form of evaluation based on the standards that can be used at different landscape scales. Assessments, conducted by qualified interdisciplinary teams (which may include but are not limited to physical, biological and social specialists, and interagency personnel) with participation from permittees and other interested parties, are appropriate at the watershed and subwatershed levels, at the allotment and pasture levels and on individual ecological sites or groups of sites. Assessments identify the condition or degree of function within the rangeland ecosystem and indicate resource problems and issues that should be monitored or studied in more detail. The results of assessments are a valuable tool for managers in assigning priorities within an administrative area and the subsequent allocation of personnel, money, and time in resource monitoring and treatment. The results of assessments may also be used in making management decisions where an obvious problem exists.

Monitoring, which is the well-documented and orderly collection, analysis, and interpretation of resource data, serves as the basis for determining trends in the condition or degree of function of rangeland resources and for making management decisions. Monitoring should be designed and carried out to identify trends in resource conditions, to point out resource problems, to help indicate the cause of such problems, to point out solutions, and/or to contribute to adaptive management decisions. In cases where monitoring data do not exist, professional judgment, supported by interdisciplinary team recommendation, may be relied upon by the authorized officer in order to take necessary action. Review and evaluation of new information must be an ongoing activity.

To be effective, monitoring must be consistent over time, throughout administrative areas, and in the methods of measurement and observation of selected indicators. Those doing the monitoring must have the knowledge and skill required by the level or intensity of the monitoring being done, as well as the experience to properly interpret the results. Technical support for training must be made available.

Measurability

It is recognized that not every area will immediately meet the standards and that it will sometimes be a long-term process to restore some rangelands to properly functioning condition. It is intended that in cases where standards are not being met, measurable progress should be made toward achieving those standards, and significant progress should be made toward fulfilling the fundamentals of rangeland health. Measurability is defined on a case-specific basis based upon the stated planning objectives (such as quantifiable, time-specific), taking into account economic and social goals along with the biological and ecological capability of the area. To the extent that a rate of recovery conforms with the planning objectives, the area is allowed the time to meet the standard under the selected management regime.

Implementation

The material contained in this document will be incorporated into existing land use plans and used in the development of new land use plans. According to 43 CFR 4130.3-1, permits and leases shall incorporate terms and conditions that ensure conformance with 43 CFR 4180. Terms and conditions of existing permits and leases will be modified to reflect standards and guidelines at the earliest possible date, with priority for modification being at the discretion of the authorized officer. Terms and conditions of new permits and leases will reflect standards and guidelines in their development.

Indicators identified in this document will serve as a focus of interpretation of existing monitoring data and will provide the basis of design for monitoring and assessment techniques, and in the development of monitoring and assessment plans.

The authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining, through assessment or monitoring by experienced professionals and interdisciplinary teams, that a standard is not being achieved and that livestock are a significant contributing factor to the failure to achieve the standards and conform with the guidelines.

Standards for Rangeland Health

Standard 1: Watershed Function – Uplands

Upland soils exhibit infiltration and permeability rates, moisture storage and stability that are appropriate to soil, climate, and landform.

Rationale and intent: This standard focuses on the basic physical functions of upland soils that support plant growth, the maintenance or development of plant populations and communities, and promote dependable flows of quality water from the watershed.

To achieve and sustain rangeland health, watersheds must function properly. Watersheds consist of three principle components: the uplands, riparian/wetland areas, and the aquatic zone. This standard addresses the upland component of the watershed. When functioning properly, within its potential, a watershed captures, stores, and safely releases the moisture associated with normal precipitation events (equal to or less than the 25-year, 5-hour event) that falls within its boundaries. Uplands make up the largest part of the watershed and are where most of the moisture received during precipitation events is captured and stored.

While all watersheds consist of similar components and processes, each is unique in its individual makeup. Each watershed displays its own pattern of landform and soil, its unique climate and weather patterns, and its own history of use and current condition. In directing management toward achieving this standard, it is essential to treat each unit of the landscape (soil, ecological site, and watershed) according to its own capability and how it fits with both smaller and larger units of the landscape.

A set of potential indicators has been identified for which site-specific criteria will be used to determine if this standard is being met. The appropriate indicators to be used in determining attainment of the standard should be drawn from the following list.

Potential indicators: Protection of the soil surface from raindrop impact; detention of overland flow; maintenance of infiltration and permeability, and protection of the soil surface from erosion, consistent with the potential/capability of the site, as evidenced by the:

- amount and distribution of plant cover (including forest canopy cover);
- amount and distribution of plant litter;
- accumulation/incorporation of organic matter;
- amount and distribution of bare ground;
- amount and distribution of rock, stone, and gravel;
- plant composition and community structure;
- thickness and continuity of the "A" horizon;
- character of microrelief;
- presence and integrity of biotic crusts;
- root occupancy of the soil profile;

- biological activity (plant, animal, and insect); and
- absence of accelerated erosion and overland flow.

Soil and plant conditions promote moisture storage as evidenced by:

- amount and distribution of plant cover (including forest canopy cover);
- amount and distribution of plant litter;
- plant composition and community structure; and
- accumulation/incorporation of organic matter.

Standard 2: Watershed Function – Riparian/Wetland Areas

Riparian/wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

Rationale and intent: Riparian/wetland areas are grouped into two major categories (1) lentic, or standing water systems such as lakes, ponds, seeps, bogs, and meadows; and (2) lotic, or moving water systems such as rivers, streams, and springs. Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Riparian areas commonly occupy the transition zone between the uplands and surface water bodies (the aquatic zone) or permanently saturated wetlands.

Properly functioning condition of riparian and wetland areas describes the degree of physical function of these components of the watershed. Their functionality is important to water quality in the capture and retention of sediment and debris, the detention and detoxification of pollutants, and in moderating seasonal extremes of water temperature. Properly functioning riparian areas and wetlands enhance the timing and duration of streamflow through dissipation of flood energy, improved bank storage, and ground water recharge. Properly functioning condition should not be confused with the desired plant community or the desired future condition since, in most cases, it is the precursor to these levels of resource condition and is required for their attainment.

A set of indicators has been identified for which site-specific criteria will be used to determine if this standard is being met. The criteria are based upon the potential (or upon the capability where potential cannot be achieved) of individual sites or landforms.

Potential indicators: Hydrologic, vegetation, and erosional/depositional processes interact in supporting physical function, consistent with the potential or capability of the site, as evidenced by:

- frequency of floodplain/wetland inundation;
- plant composition, age class distribution, and community structure;
- root mass;
- point bars revegetating;
- streambank/shoreline stability;
- riparian area width;
- sediment deposition;
- active/stable beaver dams;
- coarse/large woody debris;
- upland watershed conditions;
- frequency/duration of soil saturation; and
- water table fluctuation.

Stream channel characteristics are appropriate for landscape position as evidenced by:

- channel width/depth ratio;
- channel sinuosity;
- gradient;
- rocks and coarse and/or large woody debris;
- overhanging banks;
- pool/riffle ratio;
- pool size and frequency; and
- stream embeddedness.

Standard 3: Ecological Processes

Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.

Rationale and intent: This standard addresses the ecological processes of energy flow and nutrient cycling as influenced by existing and desired plant and animal communities without establishing the kinds, amounts or proportions of plant and animal community compositions. While emphasis may be on native species, an ecological site may be capable of supporting a number of different native and introduced plant and animal populations and communities while meeting this standard. This standard also addresses the hydrologic cycle which is essential for plant growth and appropriate levels of energy flow and nutrient cycling. Standards 1 and 2 address the watershed aspects of the hydrologic cycle.

With few exceptions, all life on earth is supported by the energy supplied by the sun and captured by plants in the process of photosynthesis. This energy enters the food chain when plants are consumed by insects and herbivores and passes upward through the food chain to the carnivores. Eventually, the energy reaches the decomposers and is released as the thermal output of decomposition or through oxidation.

The ability of plants to capture sunlight energy, to grow and develop, to play a role in soil development and watershed function, to provide habitat for wildlife, and to support economic uses depends on the availability of nutrients and moisture. Nutrients necessary for plant growth are made available to plants through the decomposition and metabolization of organic matter by insects, bacteria and fungi, the weathering of rocks, and extraction from the atmosphere. Nutrients are transported through the soil by plant uptake, leaching, and by rodent, insect, and microbial activity. They follow cyclical patterns as they are used and reused by living organisms.

The ability of rangelands to supply resources and satisfy social and economic needs depends on the buildup and cycling of nutrients over time. Interrupting or slowing nutrient cycling can lead to site degradation, as this land becomes increasingly deficient in the nutrients plants require.

Some plant communities, because of past use, frequent fire or other histories of extreme or continued disturbance, are incapable of meeting this standard. For example, shallow-rooted winter-annual grasses that completely dominate some sites do not fully occupy the potential rooting depth of some soils, thereby reducing nutrient cycling well below optimum levels. In addition, these plants have a relatively short growth period and thus capture less sunlight than more diverse plant communities. Plant communities like those cited in this example are considered to have crossed the threshold of recovery and often require great expense to be recovered. The cost of recovery must be weighed against the site's potential ecological/economic value in establishing treatment priorities.

The role of fire in natural ecosystems should be considered, whether or not it acts as a primary driver or only as one of many factors. It may play a significant role in both nutrient cycling and energy flows.

A set of indicators has been identified for which site-specific criteria will be used to determine if this standard is being met.

Potential indicators: Photosynthesis is effectively occurring throughout the potential growing season, consistent with the potential/capability of the site, as evidenced by plant composition and community structure.

Nutrient cycling is occurring effectively, consistent with the potential/capability of the site, as evidenced by:

- plant composition and community structure;
- accumulation, distribution, incorporation of plant litter and organic matter into the soil;
- animal community structure and composition;
- root occupancy in the soil profile; and
- biological activity including plant growth, herbivory, and rodent, insect and microbial activity.

Standard 4: Water Quality

Surface water and ground water quality, influenced by agency actions, complies with state water quality standards.

Rationale and intent: The quality of the water yielded by a watershed is determined by the physical and chemical properties of the geology and soils unique to the watershed, the prevailing climate and weather patterns, current resource conditions, the uses to which the land is put and the quality of the management of those uses. Standards 1, 2, and 3 contribute to attaining this standard.

States are legally required to establish water quality standards and Federal land management agencies are to comply with those standards. In mixed ownership watersheds, agencies, like any other landowners, have limited influence on the quality of the water yielded by the watershed. The actions taken by the agency will contribute to meeting state water quality standards during the period that water crosses agency administered holdings.

Potential indicators: Water quality meets applicable water quality standards as evidenced by:

- water temperature;
- dissolved oxygen;
- fecal coliform;
- turbidity;
- pH;
- populations of aquatic organisms; and
- effects on beneficial uses (such as effects of management activities on beneficial uses as defined under the CWA and state implementing regulations).

Standard 5: Native, Threatened and Endangered, and Locally Important Species

Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

Rationale and intent: Federal agencies are mandated to protect threatened and endangered species and will take appropriate action to avoid the listing of any species. This standard focuses on retaining and restoring native plant and animal (including fish) species, populations, and communities (including threatened, endangered and other special status species and species of local importance). In meeting the standard, native plant communities and animal habitats would be spatially distributed across the landscape with a density and frequency of species suitable to ensure reproductive capability and sustainability. Plant populations and communities would exhibit a range of age classes necessary to sustain recruitment and mortality fluctuations.

Potential indicators: Essential habitat elements for species, populations, and communities are present and available, consistent with the potential/capability of the landscape, as evidenced by:

- plant community composition, age class distribution, productivity;
- animal community composition, productivity;
- habitat elements;
- spatial distribution of habitat;
- habitat connectivity; and
- population stability/resilience.

Guidelines for Livestock Grazing Management

Guidelines for livestock grazing management offer guidance in achieving plan goals, meeting standards for rangeland health, and fulfilling the fundamentals of rangeland health. Guidelines are applied in accordance with the capabilities of the resource in consultation, cooperation, and coordination with permittees/lessees and the interested public. Guidelines enable managers to adjust grazing management on public land to meet current and anticipated climatic and biological conditions.

General Guidelines

1) Involve diverse interests in rangeland assessment, planning, and monitoring.

2) Assessment and monitoring are essential to the management of rangelands, especially in areas where resource problems exist or issues arise. Monitoring should proceed using a qualitative method of assessment to identify critical, site-specific problems or issues using interdisciplinary teams of specialists, managers, and knowledgeable land users.

Once identified, critical, site-specific problems or issues should be targeted for more intensive, quantitative monitoring or investigation. Priority for monitoring and treatment should be given to those areas that are ecologically at-risk where benefits can be maximized given existing budgets and other resources.

Livestock Grazing Management

1) The season, timing, frequency, duration, and intensity of livestock grazing use should be based on the physical and biological characteristics of the site and the management unit in order to:

a) provide adequate cover (live plants, plant litter, and residue) to promote infiltration, conserve soil moisture, and to maintain soil stability in upland areas;

b) provide adequate cover and plant community structure to promote streambank stability, debris and sediment capture, and floodwater energy dissipation in riparian areas;

c) promote soil surface conditions that support infiltration;

d) avoid subsurface soil compaction that retards the movement of water in the soil profile;

e) help prevent the increase and spread of noxious weeds;

f) maintain or restore diverse plant populations and communities that fully occupy the potential rooting volume of the soil;

g) maintain or restore plant communities to promote photosynthesis throughout the potential growing season;

h) promote soil and site conditions that provide the opportunity for the establishment of desirable plants;

i) protect or restore water quality; and

j) provide for the life cycle requirements, and maintain or restore the habitat elements of native (including threatened and endangered, special status, and locally important species) and desired plants and animals.

2) Grazing management plans should be tailored to site-specific conditions and plan objectives. Livestock grazing should be coordinated with the timing of precipitation, plant growth, and plant form. Soil moisture, plant growth stage, and the timing of peak streamflows are key factors in determining when to graze. Response to different grazing strategies varies with differing ecological sites.

3) Grazing management systems should consider nutritional and herd health requirements of the livestock.

4) Integrate grazing management systems into the year-round management strategy and resources of the permittee(s) or lessee(s). Consider the use of collaborative approaches (such as coordinated resource management, work groups) in this integration.

5) Consider competition for forage and browse among livestock, big game animals, and wild horses in designing and implementing a grazing plan.

6) Provide periodic rest from grazing for rangeland vegetation during critical growth periods to promote plant vigor, reproduction, and productivity.

7) Range improvement practices should be prioritized to promote rehabilitation and resolve grazing concerns on transitory grazing land.

8) Consider the potential for conflict between grazing use on public land and adjoining land uses in the design and implementation of a grazing management plan.

Facilitating the Management of Livestock Grazing

1) The use of practices to facilitate the implementation of grazing systems should consider the kind and class of animals managed, indigenous wildlife, wild horses, the terrain and the availability of water. Practices such as fencing, herding, water development, and the placement of salt and supplements (where authorized) are used where appropriate to:

a) promote livestock distribution;

b) encourage a uniform level of proper grazing use throughout the grazing unit;

c) avoid unwanted or damaging concentrations of livestock on streambanks, in riparian areas and other sensitive areas such as highly erodible soils, unique wildlife habitats, and plant communities; and

d) protect water quality.

2) Roads and trails used to facilitate livestock grazing are constructed and maintained in a manner that minimizes the effects on landscape hydrology; concentration of overland flow, erosion and sediment transport are prevented; and subsurface flows are retained.

Accelerating Rangeland Recovery

1) Upland treatments that alter the vegetation composition of a site, such as prescribed burning, western juniper management, and seedings or plantings must be based on the potential of the site and should:

a) retain or promote infiltration, permeability, and soil moisture storage;

b) contribute to nutrient cycling and energy flow;

c) protect water quality;

d) help prevent the increase and spread of noxious weeds;

e) contribute to the diversity of plant communities, and plant community composition and structure;

f) support the conservation of threatened and endangered, other special status species and species of local importance; and

g) be followed up with grazing management and other treatments that extend the life of the treatment and address the cause of the original treatment need.

2) Seedings and plantings of nonnative vegetation should only be used in those cases where native species are not available in sufficient quantities; where native species are incapable of maintaining or achieving the standards; or where nonnative species are essential to the functional integrity of the site.

3) Structural and vegetation treatments and animal introductions in riparian and wetland areas must be compatible with the capability of the site, including the system's hydrologic regime, and contribute to the maintenance or restoration of properly functioning condition.

Rangelands Glossary

Appropriate action – implementing actions pursuant to subparts 4110, 4120, 4130 and 4160 of the regulations that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines (see *Significant progress*).

Assessment – a form of evaluation based on the standards of rangeland health, conducted by an interdisciplinary team at the appropriate landscape scale (pasture, allotment, subwatershed, watershed, etc.) to determine conditions relative to standards.

Compaction layer – a layer within the soil profile in which the soil particles have been rearranged to decrease void space, thereby increasing soil bulk density and often reducing permeability.

Crust, abiotic – (physical crust) a surface layer on soils, ranging in thickness from a few millimeters to a few centimeters, that is much more compact, hard and brittle, when dry, than the material immediately beneath it.

Crust, biotic – (microbiotic or cryptogamic crust) a layer of living organisms (mosses, lichens, liverworts, algae, fungi, bacteria, and/or cyanobacteria) occurring on, or near the soil surface.

Degree of function – a level of physical function relative to properly functioning condition commonly expressed as: properly functioning, functioning-at-risk, or nonfunctional.

Diversity – the aggregate of species assemblages (communities), individual species, and the genetic variation within species and the processes by which these components interact within and among themselves. The elements of diversity are: (1) community diversity (habitat, ecosystem); (2) species diversity; and (3) genetic diversity within a species; all three of which change over time.

Energy flow – the processes in which solar energy is converted to chemical energy through photosynthesis and passed through the food chain until it is eventually dispersed through respiration and decomposition.

Ground water – water in the ground that is in the zone of saturation; water in the ground that exists at, or below the water table.

Guideline – practices, methods, techniques, and considerations used to ensure that progress is made in a way and at a rate that achieves the standard(s).

Gully – a channel resulting from erosion and caused by the concentrated but intermittent flow of water usually during and immediately following heavy rains.

Hydrologic cycle – the process in which water enters the atmosphere through evaporation, transpiration, or sublimation from the oceans, other surface water bodies, or from the land and vegetation, and through condensation and precipitation returns to the earth's surface. The precipitation then occurring as overland flow, streamflow, or percolating underground flow to the oceans or other surface water bodies or to other sites of evapotranspiration and recirculation to the atmosphere.

Indicators – parameters of ecosystem function that are observed, assessed, measured, or monitored to directly or indirectly determine attainment of a standard(s).

Infiltration – the downward entry of water into the soil.

Infiltration rate – the rate at which water enters the soil.

Nutrient cycling – the movement of essential elements and inorganic compounds between the reservoir pool (soil, for example) and the cycling pool (organisms) in the rapid exchange (such as moving back and forth) between organisms and their immediate environment.

Organic matter – plant and animal residues accumulated or deposited at the soil surface; the organic fraction of the soil that includes plant and animal residues at various stages of decomposition; cells and tissues of soil organisms, and the substances synthesized by the soil population.

Permeability – the ease with which gases, liquids or plant roots penetrate or pass through a bulk mass of soil or a layer of soil.

Properly functioning condition – *Riparian/wetland*: adequate vegetation, landform, or large (coarse) woody debris is present to dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid in floodplain development; improve floodwater retention and ground water recharge; develop root masses that stabilize streambanks against cutting action; develop diverse channel and ponding characteristics to provide the habitat and water depth, duration and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The result of interaction among geology, soil, water, and vegetation. *Uplands*: soil and plant conditions support the physical processes of infiltration and moisture storage and promote soil stability (as appropriate to site potential); includes the production of plant cover and the accumulation of plant residue that protect the soil surface from raindrop impact, moderate soil temperature in minimizing frozen soil conditions (frequency, depth, and duration), and the loss of soil moisture to evaporation; root growth and development in the support of permeability and soil aeration. The result of interaction among geology, climate, landform, soil, and organisms.

Proper grazing use – grazing that, through the control of timing, frequency, intensity, and duration of use, meets the physiological needs of the desirable vegetation, provides for the establishment of desirable plants and is in accord with the physical function and stability of soil and landform (properly functioning condition).

Reference area – sites that, because of their condition and degree of function, represent the ecological potential or capability of similar sites in an area or region (ecological province); serve as a benchmark in determining the ecological potential of sites with similar soil, climatic, and landscape characteristics.

Rill – a small, intermittent water course with steep sides; usually only a few inches deep.

Riparian area – a form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Land along, adjacent to, or contiguous with perennially and intermittently flowing rivers and stream, glacial potholes, and shores of lakes and reservoirs with stable water levels are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil. Includes, but is not limited to, jurisdictional wetlands.

Significant progress – when used in reference to achieving a standard: (actions), the necessary land treatments, practices and/or changes to management have been applied or are in effect; (rate), a rate of progress that is consistent with the anticipated recovery rate described in plan objectives, with due recognition of the effects of climatic extremes (drought, flooding, etc.), fire, and other unforeseen naturally occurring events or disturbances. Monitoring reference areas that are ungrazed and properly grazed may provide evidence of appropriate recovery rates (see *Proper grazing use*).

Soil density (bulk density) – -the mass of dry soil per unit bulk volume.

Soil moisture – water contained in the soil; commonly used to describe water in the soil above the water table.

Special Status species – species proposed for listing, officially listed (threatened/endangered), or candidates for listing as threatened or endangered by the Secretary of the Interior under the provisions of the ESA; those listed or proposed for listing by the State in a category implying potential endangerment or extinction; those designated by each BLM State Director as sensitive.

Species of local importance – species of significant importance to American Indian populations (such as medicinal and food plants).

Standard - an expression of the physical and biological condition or degree of function necessary to sustain healthy rangeland ecosystems.

Uplands - land that exists above the riparian/wetland area, or active floodplains of rivers and streams; those lands not influenced by the water table or by free or unbound water; commonly represented by toe slopes, alluvial fans, and side slopes, shoulders, and ridges of mountains and hills.

Watershed - an area of land that contributes to the surface flow of water past a given point. The watershed dimensions are determined by the point past, or through which, runoff flows.

Watershed function - the principal functions of a watershed include the capture of moisture contributed by precipitation; the storage of moisture within the soil profile, and the release of moisture through subsurface flow, deep percolation to ground water, evaporation from the soil, and transpiration by live vegetation.

Wetland - areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Appendix R

Effects of Intensity and Season of Grazing

Introduction

Interest is often focused on impacts to vegetation resources from livestock management actions, though direct impacts to a number of other resource values may occur. The composition, structure, diversity, and juxtaposition of plant communities resulting from livestock management actions provide indirect consequences for other uses and benefits. Livestock impacts to vegetation resources, both negative and positive, occur due to defoliation and browsing, as well as the physical impacts associated with the presence of livestock. Although livestock grazing in cold desert steppe plant communities is seldom necessary to meet vegetation management objectives, negative impacts can be maintained within acceptable limits with implementation of appropriate management actions. Many successful livestock grazing strategies have been developed to achieve specific ecological or management objectives. The effectiveness of meeting objectives when implementing a given strategy depends on a number of factors including associated resource values, ecological characteristics, physical characteristics, and livestock management practices (Cook 1971; Heady 1975; Laycock and Conrad 1981; Holechek et al. 1989). General trends may hold true in the relative effectiveness of different grazing strategies to meet specific management objectives, but site-specific strategies are required to integrate the interactions of unique physical features present within a pasture and the juxtaposition of that pasture within an allotment and across the landscape. Though the ecological consequences of implementing a given grazing strategy occur at the pasture level or smaller, livestock operations dependent on public land forage resources require grazing schedules which support animals on public and/or private land throughout the year.

The consequences of short-term impacts of livestock use, both in upland and riparian communities, are related to the season in which livestock graze a vegetation community as well as the intensity, duration, and frequency of use in a given year (Reed et al. 1999). Long-term consequences result from the sequence of annual use a vegetation resource receives, the severity of use, the competitive response of individual vegetation species to selective grazing or browsing by herbivores, and the resultant changes to community composition. Season and intensity of livestock grazing use in riparian communities, as well as in upland communities, has been found by a number of authors to affect riparian function and the attainment of other riparian-related objectives (Elmore 1991; Elmore and Kauffman 1993; Chapman 1987; Belsky et al. 1997; Kinch 1989; Myers 1987; Platts 1989). Periodic opportunities for recovery of health and vigor and for recruitment of new individuals into upland and riparian communities are also required to maintain or improve vegetation conditions for the amenity values of current and potential vegetation resources as well as commodity production.

Grazing and other activities that disturb the soil surface can reduce the maximum potential development of biological crusts. The potential for biological crust development is highest within salt desert shrub, Wyoming big sagebrush, basin big sagebrush, low sagebrush, black sagebrush, or stiff sagebrush vegetation communities receiving less than 12 inches of precipitation per year or less in mid- to late-seral ecological condition. Continuous season-long grazing is harmful to microbiotic crusts. Likewise, short-duration grazing strategies characterized by intense physical impacts to the soil surface are harmful to biological crusts.

especially on rangeland characterized by wet winter and dry summer climatic conditions as in the planning area.

Intensity of Use

Short-term grazing impacts to vegetation resources result from the combination of utilization levels, the season of use, and the duration of use. For the purposes of analysis, light utilization is generally defined as up to 40 percent, moderate utilization is defined as from 41 to 60 percent, and heavy utilization is defined as 61 percent and greater. Generally, the vigor of key grass species can be sustained with light and moderate utilization, while heavy utilization reduces photosynthetic tissue below levels needed to maintain root reserves, diminishing the vigor of key species. However, the timing of grazing use relative to plant phenology and the occurrence of repeat grazing of individual plants are usually considered more important factors affecting the health and vigor of key species as well as changes to vegetation community composition. Light and moderate utilization during periods when plants are withdrawing reserves from roots for growth, during regrowth, or during seed formation will impact herbaceous species greater than the same level of utilization during periods when the plant is not actively growing. A review of the literature by Anderson (1991), pertaining to the effects of defoliation and vigor recovery of bluebunch wheatgrass, revealed a high sensitivity to utilization during the active growing season, especially when that use occurred when the plant was entering the boot stage, a period early in its seed producing stage of growth. Utilization levels of thirty to forty percent under deferred grazing systems or one time utilization levels greater than 50 percent during the growing season have been shown to cause significant reductions in vigor and productivity. Time frames necessary for recovery may extend beyond the average two to four year cycle frequently used in grazing rotations.

One review of the classic long-term stocking rate and grazing system studies identified a general ability to meet objectives, including productivity of primary forage plants, livestock performance and financial returns, when moderate stocking involves 50 percent use in southern pine forests, humid grasslands, or annual grasslands. Within semi-arid, desert, and coniferous forest rangelands, plant communities most common in the southeast Oregon planning area, research was consistent in showing that moderate grazing involved about 35 to 45 percent use of forage (Holechek et al. 1999) .

Forb species tend to not have the ability to regrow following grazing. While grasses tend to have growing points close to the soil surface, growing point of forbs are elevated with growth. As a result, grasses are less likely to have growing points removed with light to moderate levels of grazing while growing points of forbs are easily removed, even with light grazing. Additionally, some forbs are highly palatable and sought out by grazing animals, especially sheep.

Long-term impacts of moderate to heavy utilization are dependent on individual plant species' ability to maintain health and vigor, recover from impacts, and remain competitive while being utilized by grazing animals. The composition of a vegetation community, as it relates to the relative palatability of different plant species available for grazing, will affect measured utilization and subsequent levels of competition between individual plants. Although stocking rates are usually established to limit utilization to light or moderate levels, factors affecting livestock distribution will cause some areas where animals tend to concentrate to be utilized to a heavy degree, while other areas may remain unused or only slightly used.

The intensity of livestock use will also affect other resource values, including the ability to meet management objectives which relate to standing vegetation material and ground cover remaining after use. As utilization levels are increased, canopy cover of grazed and browsed plants declines. Additionally, deposition of protective plant litter to the soil surface and incorporation of litter into the soil is decreased. As a result, increased utilization can reduce cover of bare ground by vegetation material and litter, increase puddling of clay soils by raindrop impact, reduce rates of infiltration of precipitation, and reduce permeability and moisture storage of soils. Excessive utilization levels can contribute to increased overland flow of precipitation and snowmelt, soil erosion, siltation of streams, and a decline in surface water quality affecting beneficial uses. Benefits to sagebrush dependent wildlife species of retaining standing herbaceous vegetation on side subsequent to livestock use are identified in Appendix F.

Light use or nonuse by domestic livestock for long periods of time in nonnative seedings, primarily crested wheatgrass, diminish green forage values for wildlife because grass plants become rank and unpalatable. Periodic moderate grazing makes available spring or fall green-up (new vegetative growth initiated by growing season soil moisture) or conditioned forage for Canada geese, big game, or other wildlife species. Green-up is valuable to wildlife because it provides succulent, nutritious, and easily digested forage. Nearly all classes of wildlife from songbirds to big game can be observed consuming green-up whenever and wherever it is available throughout the year. Domestic livestock and wild horses also consume green-up for its palatable and nutritional qualities.

The value of green-up for wildlife species is highest within habitats used during fall, winter, and early spring. Where green-up is available on winter ranges, it helps animals to maintain their physiological condition and therefore can be directly tied to winter and early spring survival. The nutritious character of spring green-up prepares some animals for the physiological demands of spring breeding activity and therefore it can be tied to animal population productivity. Where green forage is unavailable for prolonged periods due to drought and normal summer conditions, green-up helps to restore animal health and therefore can be tied directly to wildlife recovery from cyclic or seasonal stress.

Domestic livestock grazing which retains a patchy appearance including lightly to moderately grazed and ungrazed areas within native rangeland may benefit wildlife habitat values by providing a combination of seasonally important values. Grazed portions may provide conditioned forage for some wildlife species during late summer, fall, and winter, though conditioned forage is seldom a limiting factor on native rangeland. Ungrazed or lightly grazed portions provide high quality cover and structure for hiding and thermal value.

Native upland range that is not grazed by domestic livestock is a desirable wildlife habitat condition. It is generally in limited supply and typically provides very high quality structure and native forage for wildlife use. Maintenance of ungrazed native range conditions by avoiding new water developments, salting, and fencing is considered a beneficial mitigating measure for the protection of wildlife habitat values. Additionally, ungrazed areas provide refuge for wildlife from domestic livestock and livestock management activities.

Season of Use

Livestock impacts to public land resources are dependent on the season of use as it relates to timing of grazing during the growth cycle of plants (see Table R-1), spacial and seasonal conflicts with annual life cycles of wildlife species, physical condition of resources, and other factors. All dates referenced are approximations dependent on elevation and climatic conditions and need to be interpolated on a site-specific basis. Analyzed seasons overlap due to variation in the growing conditions between years and a lack of clear seasonal divisions in anticipated impacts to existing or potential resource values. Thus, impacts resulting from livestock use early or late during any season may also be accurately define by described impacts during the proximate season based on those variables.

Winter (November 1 to March 1)

Upland herbaceous plants are mostly dormant during the winter season of use with the exception of some photosynthesis by new growth after fall and winter precipitation and during warming weather trends, primarily on south exposed slopes. Forage quality of cured standing herbaceous vegetation is moderate to low, improving when mixed with new growth or browse from palatable shrubs. Light to moderate utilization of standing cured herbaceous vegetation is not detrimental to health and vigor of plants. Light to moderate defoliation of new growth usually is not detrimental to maintenance of health and vigor of herbaceous species since soil moisture will be available for spring and early summer growth, regrowth, and completion of the annual cycle prior to soil moisture depletion. Grazing of fall sprouting annual species may reduce competition with desirable perennial herbaceous species during the following growing season. Light to moderate utilization levels will retain adequate standing material and litter for soil protection from wind erosion, rainfall impact, and late winter and spring runoff. Heavy utilization levels will expose the soil surface to these negative impacts, especially on sites with marginal potential to produce a reasonable vegetation cover and in years with limited growth of protective vegetation cover. The potential for repeated grazing of localized areas, resulting in heavy utilization, is present with severe weather conditions and snow accumulation reducing livestock distribution. Negative impacts intensify on palatable shrub species when snow accumulation makes herbaceous species unavailable. Livestock management actions to maintain animal distribution are oftentimes limited by weather and accessibility.

Winter use is usually the least detrimental to soils and to dormant riparian herbaceous and woody vegetation. Herbaceous riparian species are mostly dormant in this season with some active photosynthesis occurring during warming trends when plants are free of snow and ice cover. During these fair weather periods, dormant woody riparian species may be used to some degree; therefore, may be subject to live twig growth being removed. Riparian communities tend not to be used by livestock during moderate weather conditions where cold air drainage settles into low-lying areas throughout the majority of the winter. Dramatic recovery rates have occurred in riparian areas when cold drainage patterns and/or the availability of alternate livestock water keep livestock away from streams. Where winter temperatures are moderate and cold air does not settle into low-lying areas, dormant woody riparian species can be negatively affected by browsing or trampling when livestock movement is restricted. The potential for livestock to concentrate in riparian communities to avoid severe weather conditions and attempt to drift to base property feeding grounds requires a high level of livestock management activity to avoid negative impacts to riparian vegetation resources at a time when access to public land is limited. Winter use provides rest during the growing period every year, promotes plant vigor, seed and root production, and seedling establishment. It may be the period of greatest use of browse species by both livestock and wildlife depending on temperatures, snow depth and duration, availability of other feed, animal concentration, forage/browse preference, and the extent of the woody plant community. A full understanding of expected livestock use patterns is necessary using this strategy or land use objectives may not be achieved. Utilization levels of herbaceous riparian species should be limited to maintain adequate material on streambanks and floodplains for protection during late winter and spring runoff. Heavy grazing during the winter can eliminate the streambank vegetation mat needed to prevent soil erosion from winter and spring floods or ice events. Throughout the winter, frozen soil and streambanks are more resilient to mechanical damage thereby minimizing streambank shear, thus resulting in little bank damage.

Areas suitable for winter grazing by livestock are, at times, also prime winter range for native large herbivores. Spacial conflicts for habitat and conflicts for limited forage are more common than at other times of the year. With snow cover of herbaceous species, livestock browse of shrub species may remove a valuable winter source of feed for wild herbivores. Viability of mountain shrub species as well as quaking aspen recruitment may by jeopardized with winter use of these vegetation communities by livestock.

Winter grazing may have the least impact to biological crusts as identified in the ICBEMP Final EIS. Early winter grazing when soils are wet or frozen is not harmful to biological crust cover. Heavy grazing that persists into late winter and early spring however becomes harmful because it limits time available for regrowth of lichens and algae. These organisms can continue to grow from late winter through early spring because of optimal soil water conditions, but growth is disrupted if heavy livestock grazing persists. After early to late spring, soil water conditions are no longer optimal for biological crust development. These impacts to biological crusts appear to be applicable to salt desert shrub and adjacent dry sagebrush cover types in the planning area.

Spring (February 1 to May 1)

Early growth of herbaceous species, primarily cool season species, occurs with rising soil temperatures. Minimal impacts to plant vigor and health occur with light to moderate utilization of early growth when adequate soil moisture is available for regrowth and completion of the annual growth cycle. Moderate utilization, in years with minimal soil moisture available for regrowth after use, could deplete plant vigor and health, especially during periods of critical growth. Heavy to severe defoliation can expose the soil surface to future erosive forces of wind and water. Additionally, heavy utilization can remove structural diversity valued for wildlife habitat. Use of palatable annual species early in this period may reduce competition with desirable native perennial species when grazing is removed and adequate soil moisture remains to complete growth cycles.

Table R-1.—*Approximate growth stage dates for key species*

Species	Start of growth	Peak of flowering	Seed ripe	Dormancy	Start of growth	Peak of flowering	Seed ripe	Dormancy
	4,000 feet elevation				**4,700 feet elevation**			
Bluebunch wheatgrass	03/15	06/15	07/15	08/15	03/25	06/25	08/15	09/01
Idaho fescue	04/01	07/01	08/01	09/15	04/05	07/01	08/15	10/01
Crested wheatgrass [1,2]	03/10	06/10	08/01	09/01	03/15	06/10	08/01	09/01
Bottlebrush squirreltail	03/25	06/01	07/01	08/01	03/25	06/01	07/01	08/01
Thurber's needlegrass	03/25	06/15	07/15	09/01	04/01	06/15	07/15	09/01
Sandberg bluegrass [2]	03/10	04/15	05/15	06/15	04/01	05/05	06/15	07/15
Antelope bitterbrush [3]	04/10	06/05	07/30	11/01	04/10	06/05	09/15	11/01
	6,000 feet elevation				**7,500 feet elevation**			
Bluebunch wheatgrass	04/25	07/15	08/15	09/15	05/10	07/20	09/01	10/15
Idaho fescue	05/10	07/20	09/01	10/01	05/20	07/25	09/10	10/15
Crested wheatgrass [1,2]	N/A [4]	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottlebrush squirreltail	05/01	06/25	08/01	09/01	05/01	06/25	08/01	09/01
Thurber's needlegrass	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sandberg bluegrass [2]	04/15	06/25	08/01	09/01	05/01	07/01	08/01	09/01
Antelope bitterbrush [3]	05/01	07/01	08/20	11/01	05/01	07/01	10/01	11/01

[1] Key species for seeded areas.
[2] Key species for deer and antelope spring range.
[3] Key species for deer winter range.
[4] N/A = plant does not occur at this elevation.

Early growth of herbaceous vegetation contains high water content and thus, when combined with leached old growth, has only moderate forage quality, improving after mid-March in most years. The hazard of compaction of wet soils with hoof action of livestock may be present, resulting in a reduction of infiltration and soil moisture holding capacity in fine-textured soils. Opportunities for good livestock distribution are present with more locations of available water and cool air temperature.

Riparian vegetation communities are less vulnerable to negative impacts from livestock use during this season for a number of reasons. Improving forage quality in upland communities will draw livestock from riparian communities as will available alternate water sources located outside streamside riparian communities. Spring use normally results in better livestock distribution between riparian and upland areas due to flooding of riparian areas and presence of highly palatable forage on the uplands. Also, cooler seasonal temperatures allow livestock to forage longer between visits to water sources. Opportunities for regrowth of herbaceous species are present through the remainder of the growing season. Most woody riparian species do not initiate growth until late spring, resulting in lower palatability than at other seasons of the year. If periods of use allow for adequate regrowth and do not correspond to the seasons of woody riparian species reproduction, grazing during this period can be very beneficial to riparian areas, especially in establishing woody plants. Conversely, this can be detrimental to upland grasses if grazing strategy results in utilization during the critical part (shoot elongation) of their growing season. Heavy defoliation and physical impacts by livestock can expose banks and floodplains to the hydraulic energy of high spring streamflow and peak runoff. Heavy use on finer textured soils in riparian areas with steep gradients may cause soil compaction, accelerated streambank losses or increased erosion rates. Hoof action can result in trampling of seed and litter into wet soil, although on some saturated soils, plants are more easily uprooted by grazing animals than would be possible later in the year. Care must be taken to prevent streambank hoof shearing and to leave adequate carryover vegetation for bank protection and silt filtering during spring runoff.

Wild native herbivores typically reach their lowest physical condition during this period, especially in years with heavy snowfall and limited forage availability. As a result, the potential for competition between livestock and wildlife species early during spring use is great on winter ranges. Activities associated with livestock management during this period can also increase stress to wildlife species, especially within areas of raptor nesting habitat.

Early spring grazing may have the potential for low impact to biological crusts as identified in the 2000 "Interior Columbia Basin Supplemental Draft EIS," especially when that use exceeds slight to light in intensity.

Upland Growing Season (April 1 to July 15)

Upland plants are actively growing, removing carbohydrates from roots and crowns for early growth, regrowth, and seed formation. Herbaceous plants are susceptible to defoliation impacts as a result of the depletion of carbohydrates in roots and crowns, especially with moderate to heavy utilization, repeated grazing, and/or frequent growing season use. Grass species are especially susceptible to impacts from defoliation during seed formation and seed stalk elongation, due to the increased withdrawal of carbohydrate reserves from roots and crowns. Opportunities for regrowth and completion of the annual growth cycle after defoliation are limited, especially in years of below average precipitation. Introduced perennial bunchgrass species are better adapted to maintaining vigor with defoliation than native herbaceous species, having evolved with the grazing pressure of more large herbivores. Soil compaction from the physical presence of livestock remains a concern with moist soils, especially in areas with shallow and fine-textured soils. Upland shrub species reach maximum growth withdrawing shallow soil moisture early and deeper water reserves as the season progresses. Opportunities for good livestock distribution during the early portion of this season are present with more locations of available water, high palatability of high quality forage, and cool air temperature. Repeated use during the growing season can be expected to reduce vigor and health of desirable perennial herbaceous species and lead to trends away from desired future conditions.

Riparian vegetation communities initiate active growth during this season, especially during the later portion. Impacts to riparian resources are minimal with light to moderate utilization levels on herbaceous and woody species and minimal physical impacts. Livestock begin to concentrate in riparian vegetation communities as the season progresses for higher quality forage, browse, water, and shade with higher ambient temperatures. Opportunities for regrowth of herbaceous vegetation following use remain throughout the summer with available moisture in riparian soils. Desirable woody riparian species become vulnerable to impacts from moderate to heavy use mid-way through this season when active growth is initiated. Heavy levels of utilization or high levels of physical impacts can expose banks and floodplains to impacts from high streamflows during late spring and summer flooding.

Late spring grazing may have the potential for moderate impact to biological crusts as identified in the 2000 "Interior Columbia Basin Supplemental Draft EIS," especially when that use exceeds slight to light in intensity.

Summer (July 1 to October 31)

A deferred season of use provides for livestock grazing after most of the upland species have reached seed-ripe stage and replenished carbohydrate reserves. Most upland plants, including native and introduced bunchgrass species, have completed their annual growth cycles and have entered senescence. As a result, upland communities have declining forage quality and lower palatability to wildlife and domestic herbivores. Livestock will tend to turn to palatable browse species, especially when herbaceous utilization levels become heavy late during this period, to maintain a given level of nutrition when mixed with lower quality herbaceous feeds. With the onset of senescence, native upland vegetation communities are less susceptible to negative impacts of light to moderate defoliation. Introduced perennial bunchgrass species are better adapted to maintaining vigor with defoliation than native herbaceous species, having evolved with more large herbivores. Heavy to severe defoliation can expose the soil surface to future erosive forces of wind and water. Livestock distribution away from water sources is limited by high ambient temperatures increasing the need for frequent watering and causing cattle to graze primarily during the evenings and throughout the night, while becoming less active during daylight hours. Localized impacts from defoliation and the physical presence of livestock intensify, especially near water sources and other areas of concentrated activity. Additionally, nutrient concentration will occur in areas of concentrated livestock activity.

Riparian vegetation species, both woody and herbaceous are actively growing with a sustained source of water available for continued photosynthesis. The potential for regrowth of herbaceous species remains through most of the summer, while soil moisture and temperatures are maintained. Regrowth of woody riparian species, especially Lewis' mockorange, is limited after moderate to heavy use, especially late in the period. Forage value and palatability are high from standing riparian herbaceous and woody growth. The potential for poor livestock distribution, away from riparian communities, exists as the availability of stock water in upland communities declines, forage value in upland communities declines, and with higher ambient temperatures. Livestock tend to concentrate in riparian vegetation communities for water, high quality green forage, and shade when intensive livestock management is lacking. Use during this period typically provides no rest during the growing period for plant vigor, reproduction, or litter accumulation and generally results in heavy utilization of woody riparian vegetation, trampling damage, soil compaction, and accelerated streambank erosion. Since rest is never provided, riparian plants do not replace food reserves in roots; seed may or may not be produced. Concentration of livestock in riparian areas results in heavy use of woody and herbaceous riparian species. Impacts to riparian values are typically greater during summer and early fall use than at other seasons of the year.

Competition between wildlife species and livestock is usually minimal when summer utilization levels are maintained at light to moderate levels. Those wildlife species that are mobile tend to inhabit portions of the range less used by livestock, while those less mobile species tend not to be significantly impacted so long as utilization levels and related management activities do not disrupt habitat and security.

Summer grazing may have the potential for high impact to biological crusts as identified in the 2000 "Interior Columbia Basin Supplemental Draft EIS," especially when that use exceeds slight to light in intensity.

Fall (September 15 to December 15)

Herbaceous upland plants remain senescent with minimal new growth and some regrowth during warming conditions when soil moisture has been replenished by fall precipitation. Upland herbaceous health and vigor is not impaired with light to moderate utilization of cured standing materials. Heavy to severe use may expose soils to erosion from wind and water for an extended period through the initiation of spring growth. Cooler ambient temperatures, with some fall regrowth of upland herbaceous species, may provide for better livestock distribution than during summer. Forage quality of upland herbaceous species remains low, though improving with the initiation of new fall growth. Livestock will retain a percentage of palatable browse species in their diets, when available, to maintain a given level of nutrition by combining it with lower quality herbaceous feeds.

Riparian herbaceous and woody species enter dormancy with cool temperatures and freezing conditions. Opportunities for limited livestock grazing of pastures containing riparian values are present so long as utilization levels on herbaceous and woody species do not impair riparian function with peak streamflows. Moderate to heavy use of riparian herbaceous species, with little opportunity for regrowth to facilitate sediment retention, may expose banks and floodplains to hydraulic forces of high streamflow during winter and spring runoff. The potential for improved livestock distribution, away from riparian communities, is greater than during summer use, though less than during spring use. During years with extended summer heat and drought, livestock water may be limited to riparian communities. Use during this season can be detrimental to riparian vegetation if heavy utilization of woody species occurs because temperatures are warm, fall green-up has not occurred, or utilization is not closely monitored. Fall grazing usually allows for less soil compaction in riparian areas; although streambank damage may be considerable from hoof action shearing if excessive fall precipitation occurs. Livestock impacts to riparian vegetation are directly related to the intensity of livestock management practices implemented by operators.

Livestock's use of big game winter range can limit the availability of both herbaceous and browse species for wildlife during subsequent winter periods as identified in the section on winter use. Competition between livestock and wildlife species increases with greater levels of utilization and the resultant increase of browse species in livestock diets.

Late fall grazing may have the potential for low impact to biological crusts as identified in the 2000 "Interior Columbia Basin Supplemental Draft EIS," especially when that use exceeds slight to light in intensity.

Seasonlong

Seasonlong grazing of a pasture generally begins during the growing season and extends to the end of the period of authorized use, typically into the fall period. Many of the impacts associated with use during the growing season occur with seasonlong use. Additional impacts occur from localized livestock concentration late in the season as sources of water diminish, as forage quality in upland communities declines, and as ambient temperatures rise. The effects of seasonlong grazing on species composition are largely dependent on the degree of utilization on the key species. Although the proposed stocking rates are designed to achieve moderate levels of utilization on most areas, factors such as terrain, location of fences and water, and vegetation types available, prevent uniform patterns of grazing. Heavy grazing will inevitably occur in some areas while light utilization will occur in others. A trend away from desired future conditions is expected in areas receiving moderate to heavy utilization on an annual basis, especially when that use occurs during critical growing periods.

Livestock tend to concentrate in riparian communities from summer on, when these areas are available. Decreases in woody and herbaceous riparian species are expected to occur in streamside riparian vegetation communities accessible to livestock under seasonlong use. Livestock prefer green herbaceous and new growth of woody species within riparian communities as upland communities dry and loose forage quality in late summer. This strategy typically provides no rest during the growing period for plant vigor, reproduction, or liter accumulation. It generally results in heavy utilization of woody riparian vegetation, trampling damage, soil compaction, and accelerated streambank erosion.

No pastures in the planning area are scheduled for yearlong (March 1 through February 28) grazing by domestic livestock.

Exclusion (No Scheduled Livestock or Wild Horse Use)

Defoliation of herbaceous and shrub species is limited to that which occurs from insect and native herbivore use. Except in instances when native herbivore numbers are high, upland utilization levels during the growing season and dormant seasons are light. In any year, small areas of concentrated native herbivore use may have moderate to high utilization levels. Residual standing herbaceous material and litter accumulation is greater than with scheduled use by livestock or wild horses in any season. Soil protection from rain impact is high, limiting erosion and improving soil structure and infiltration. The initiation of herbaceous growth with warming spring soil temperatures may be slightly delayed due to greater interception of solar radiation by standing and down litter.

The complete elimination of livestock and wild horses from riparian vegetation communities in many cases provides for a more rapid rate of recovery of both herbaceous and woody components than will scheduled use in any season. Residual herbaceous material and a diverse age structure of woody species will protect streambanks during peak flows of all seasons. In the absence of consideration of the ecological linkages between upland, riparian, and aquatic communities, potential rates of recovery of riparian communities may be limited when upland management plans are not designed to restore and protect the entire landscape.

Grazing Schedules

Livestock grazing schedules are implemented to provide opportunity for unacceptable resource conditions to improve, to maintain resource values which are consistent with the DRFC and other management objectives, or to avoid unacceptable impacts to resource values or conflicts between uses of public land resources. Anticipated short and long-term impacts from annual use of a pasture during any one season are presented above. Though some established grazing schedules provide for annual use of a pasture during one specified season, more often the mix of management objectives associated with a given pasture can better be met by varying the season of use over a repeating cycle of two or more years. Multiyear grazing schedules are primarily developed with varied seasons of use through an established rotation to allow desirable vegetation species the opportunity to regain vigor and health for future growth, productivity, and sustainability of resource values. Similarly, opportunities for recovery from grazing impacts to other resources, specific to a season of use, may be provided by varying the season in which livestock graze a pasture. Long-term and cumulative impacts of implementing a grazing scheme will define trend toward future vegetation communities and resource conditions.

Conversely, constraints necessary to meet multiple management objectives may limit opportunities for grazing use to one short period annually, or no scheduled use in some years, to ensure that all management objectives are met. Examples include the compounding effects of objectives to improve riparian function or meet other riparian management objectives while maintaining upland stability and function. Though scheduled use during the upland growing season annually may be compatible with objectives to improve riparian function, health and vigor of desert steppe vegetation communities can seldom be improved or maintained with annual growing season defoliation. Similarly, scheduled deferment of grazing use until after seed-set may be compatible with meeting upland vegetation management objectives while not maintaining healthy riparian vegetation communities which support proper functioning condition. As a result, the combined objectives may further constrain opportunities for varied seasons of use.

Speciality Pastures

Construction of fences and use of other barriers to livestock movement may be utilized to create speciality pastures and implement grazing schedules consistent with meeting specific management objectives when resource values, such as riparian vegetation communities, are present in only a portion of an existing pasture. Development of speciality pastures is applicable in areas where resource values encompass a small enough area to justify fencing and to manage them separately from areas that are solely comprised of upland vegetation communities and few other resource values. Speciality pastures may continue to be grazed while meeting objectives or excluded from livestock use. Construction of fences to create corridor or riparian pastures allows riparian recovery or maintenance while allowing grazing of other uplands sites to occur with grazing strategies providing for more livestock use. Riparian pastures are normally areas of rangeland containing both upland and riparian vegetation communities large enough to support some livestock use while managed to attain riparian, water quality, and/or aquatic objectives, as opposed to stream side pastures created through corridor fencing. Total rest of riparian pastures is required at times during the first few years of corrective management of a deteriorated riparian area where the objective includes the establishment of shrub or tree growth above the reach of livestock. As riparian vegetation within riparian pastures regains vigor and productivity, available forage for livestock use may often be increased while continuing to meet management objectives. Corridor pastures are generally excluded from livestock use, or used only for trailing purposes, since the areas enclosed are usually too small and narrow for proper grazing.

Grazing Rotations

Most multiyear grazing schedules can be defined as either a deferred-rotation or rest-rotation schedule. Both types of grazing schedules were designed primarily to promote plant vigor, seed production, seedling establishment, root production, and litter accumulation for herbaceous plants in upland ecosystems. Deferred rotation grazing schedules provide for one or more years of grazing use after seed-set, following one or more years of growing season use. In its simplest form, a deferred rotation grazing schedule within a pasture provides for a 2-year rotation cycle with 1 year of use during the critical period of plant growth followed by 1 year of deferment of use until after the growing season. More conservative schedules provide for a higher proportion of deferment than years of use during the period of active growth. Rest-rotation schedules allow for similar opportunities for recovery with one or more years of the grazing rotation in which no use is scheduled. Caution should be implemented to ensure that higher levels of utilization during use periods of a pasture do not preclude meeting management objectives while providing for rest in other pastures. At moderate utilization levels, either rest-rotation or deferred-rotation grazing systems can allow for adequate recovery of upland herbaceous root growth and associated carbohydrate storage following the impacts of critical season defoliation. The number of years of rest or deferment necessary to meet vegetation management objectives is dependent on a number of factors including resource conditions, soil and climatic factors, and the intensity of grazing use. With an increase in the proportion of years of rest or deferred use to the number of years of use during the critical season, the opportunity for recovery and maintenance of plant health and vigor is improved. Recovery following heavy use during the critical growing season may require a substantial number of rest or deferment years to provide adequate opportunities for recovery of health and vigor, especially when growth conditions are poor or if the vegetation resource is in poor ecological condition.

Most rest-rotation and deferred-rotation grazing schedules, designed for the physiological needs of herbaceous upland plants, can be successful within wide, low gradient sedge, rush, and grass-dominated riparian sites, provided utilization levels in riparian communities are maintained within acceptable limits. These strategies have been found to maintain species diversity and productivity of meadow systems when use is deferred in these areas until after seedripe. This promotes seed and root production, seedling establishment, and total growing period rest for each pasture every year. The need for additional livestock management may be necessary to maintain livestock distribution. Riparian herbaceous species having a natural potential to regrow following use provide for recovery and maintenance of resource values in years of the rotation when grazing occurs during the growing season. Caution in years of mid to late season use should ensure that cover necessary to buffer erosion from floods and ice is maintained and to trap sediment during high flow events. Similarly, in years of the rotation when grazing occurs during a season with high soil moisture, caution should be implemented to prevent trampling and shear damage to banks.

Rest rotation and deferred-rotation schedules are usually inappropriate for shrub-dominated riparian areas, especially in the primary stages of willow establishment and development. Establishment and growth of woody riparian species, which is attained in years when the pasture is rested or during a season of use compatible with progress toward attaining riparian objectives, may be nullified in the years of use when grazing occurs during a period not consistent with maintenance or improvement of riparian values. Maintenance of established riparian communities containing a woody component may ultimately result in a population of only mature decadent stands of woody species, providing no ongoing replacement of younger stands. When these schedules are implemented, levels of use of woody riparian species must be monitored because utilization occurring during the summer months has been found to limit woody plant succession on gravel bars and other scoured areas along stream channels. Heavy utilization during late grazing periods can lead to removal of vegetation needed to protect streambanks from ice and water scouring.

Improvement of vegetation composition toward desired conditions may require recruitment of new individuals of desired species through seeding, planting or natural regeneration from vegetation materials on site. Establishment of desirable seedlings into a vegetation community may require a sequence of rest and/or deferment years to avoid defoliation and physical impacts of livestock presence. Similarly, recruitment of new shoots of desirable woody species in upland and riparian may require more than 1 year of rest to establish old wood, which is less palatable, and to allow growth above the reach of domestic herbivores. Removal of livestock from riparian vegetation communities may be required to allow these communities to recover herbaceous and woody species composition adequate to attain functioning condition. Upon improvement to functioning condition, a grazing schedule consistent with maintaining riparian function may be implemented.

Generally within desert steppe vegetation communities, no more than one period of use of a given pasture is planned in any 1-year's grazing schedule. An exception is spring/fall use in which livestock are removed in the spring while sufficient soil moisture is available for regrowth. Fall use occurs after most vegetation species have completed their growth cycle and are dormant. This schedule is used primarily within seedings of nonnative perennial bunchgrasses to maintain productivity and availability of species adapted to grazing use.

Appendix S

Standard Implementation Features and Procedures for Rangeland Improvements

Rangeland projects and improvements are proposed and completed as a portion of adaptive management implementation to help reduce resource management conflicts and to achieve multiple use management objectives. The following standards and design elements will be adhered to in constructing rangeland improvements within the planning area. Design elements have been standardized over time to mitigate impacts encountered during rangeland improvement installation.

- Preparation of site-specific NEPA documentation of analysis of the proposed project (EIS, EA, categorical exclusion, or administrative determination) will be required prior to implementation. Proposed rangeland improvements may be modified or abandoned or an EIS may be required if the analysis indicates that significant adverse environmental impacts cannot be avoided or mitigated.
- A wilderness inventory of public land within the planning area has been completed as required by FLPMA. As a result of this inventory, certain Federal land in the planning area was designated as WSA's. All rangeland management activities, including project development and maintenance, in WSA's would be consistent with BLM's IMPLWR unless and until the area is removed from the study category (either wilderness designation or the WSA is released by Congress). Impacts of actions proposed within WSA's would be assessed, before implementation of any management activities, to ensure that they meet policy.
- Every effort will be made to avoid adverse impacts to cultural resources. A cultural resources inventory will be completed prior to any surface-disturbing activities associated with the implementation of proposed rangeland improvements. This will be part of the preplanning steps of a project and the results will be part of the NEPA compliance prior to implementation. If significant cultural values are identified, mitigating actions may include relocation, redesign or abandonment of the project. However, where mitigation is not possible, the BLM will consult with the SHPO and the Advisory Council on Historic Preservation. This is in accordance with the programmatic memorandum of agreement by and between the BLM, the Council, and the National Conference of State Historic Preservation Officers, dated January 14, 1980, which sets forth a procedure for developing appropriate mitigative measures, in compliance with section 106 of the "National Historic Preservation Act" (1966). Management adherence to agreed upon mitigative measures will be implemented in compliance with these regulations.
- If a project could potentially affect any listed or proposed threatened or endangered species or its critical habitat, consultation with the USFWS will be initiated (ESA). The project may be modified, relocated, or abandoned in order to meet ESA requirements. If a project may contribute to the need to list a Federal candidate or Bureau sensitive species, a technical assistance request will be made to the USFWS. Any disturbances to Bureau assessment and/or tracking species will be documented. Mitigating actions to minimize impacts to all special status species will be incorporated where practical and feasible.
- Projects which have the potential to adversely affect relevant or important values in ACEC's would be evaluated to identify potential impacts. Proposed actions would be

redesigned to avoid adverse impacts, appropriate mitigating actions would be required, or the proposed project would be abandoned to maintain the relevant and important values for which the ACEC was designated.

- Surface-disturbing activities associated with project implementation will be held to a minimum necessary to complete the project. Disturbed soil will be rehabilitated to blend into surrounding soil surfaces and vegetated as needed with adapted perennial species to stabilize soils and preclude invasion and dominance of undesirable and weedy species.
- Projects which manipulate vegetation composition, including seedings and woody species control projects, will be completed primarily to direct vegetation composition toward desired conditions and to enhance and sustain multiple use values. The preferred method for control of woody species is burning with management ignited or natural ignited fire, but may include cutting, chaining, or spraying of herbicides. Vegetation treatment projects will be designed and implemented utilizing irregular patterns of treatment consistent with topography, VRM, and site potential. Design will provide optimum edge effect for visual quality and desirable landscape diversity for all values. Layout and design will be coordinated with interested publics, including ODFW.
- Seeding of herbaceous and shrub species will be accomplished primarily by use of rangeland drill or similar techniques to enhance the probability of seeding success. Broadcast seeding of herbaceous and shrub species will occur on small disturbed areas, rough terrain, and rocky areas where drilling is inappropriate. Proposed seeding within WSA's or RNA's would be addressed on a case-by-case basis in accordance with policies. Additionally, current and accepted technologies (including drilling, broadcast seeding, and planting of seedlings) will be implemented to ensure the success of establishment of desired species mixtures and attainment of desired future conditions within vegetation communities. Methods of establishment used will be determined on a site-specific basis during project planning. Seed mixtures will be determined on a site-specific basis to include perennial species adapted to climatic and edaphic conditions, based on the best available information from appropriate State and local rangeland and wildlife experts. Where rangeland drills are used, slopes will be drilled on the contour to minimize soil movement. All seedings, including those areas rehabilitated following wildland fire, will be deferred from livestock grazing for a minimum of two growing seasons and until seedlings have established vigor, to allow seeding establishment. Additional herbaceous production resulting from vegetation manipulation projects and fire will not be allocated for use until monitoring data support that it is available on a sustained basis.
- The existing road and trail system will be utilized to provide access for rangeland project construction and maintenance. If needed, unimproved trails and tracks may be developed to reach construction sites unless this action is inconsistent with the management of SMA's, then other means of access may be required. New trails and tracks would continue to be used for project maintenance. Any new authorized road construction would be in accordance with standard operating procedures and BMP's for road construction.
- Normal maintenance of existing projects and new projects will occur, as consistent with original design, through the life of the plan in order to support authorized uses of public land. Maintenance can include activities such as replacement of pipeline sections, fencepost and wire replacement, cleaning of reservoirs within the original disturbance area, replacement of water troughs, cleaning and maintenance of spring boxes, cleaning or resetting of cattleguards, and maintenance of livestock handling facilities. While maintenance of existing facilities may occur in SMA's, there may be further mitigation actions required to ensure that values of these places are not impaired.
- A visual resource contrast rating procedure would be employed to minimize adverse impacts created by proposed projects on the landscape.
- Additional design features are identified in the following discussion of the individual types of improvements.

- Reservoir development would involve the construction of pits and dams to impound surface water for livestock, wildlife, and other resource values. Rights to use water on public land associated with the construction of reservoirs and pits be acquired, perfected, maintained and administered under the substantive and procedural laws of the State of Oregon. Pits would be constructed in playas, dry lake-beds, and other natural depressions. Dams would be constructed in drainages. Water storage capacity of pits or reservoirs would generally be less than 2.0 acre-feet. Fill material to complete dam construction may come from the impoundment area or a borrow area outside the impoundment area. Excavated material from pits would be piled adjacent to the pit. Topsoil would be stockpiled to be used for rehabilitation of borrow areas and other areas stripped of soil. As consistent with resource objectives, reservoirs and pits may be excluded from livestock use through fencing or other means
- All State of Oregon water well drilling regulations would be adhered to, both in drilling and equipping. A safety devise would be installed on new power line transformers to prevent electrocution of raptors. Metal storage tanks would be painted to blend with the surrounding landscape. Consistent with VRM objectives of the area, wells and associated structures would be located where topographic features or vegetation would serve to screen associated structures and disturbances from the casual observer.
- Spring development would involve digging or drilling to intercept naturally occurring waterflow. Perforated pipe and/or collection boxes would be utilized to collect and divert water through a pipeline to troughs away from vegetation communities associated with spring areas. Usually, the spring source and trough overflow area would be fenced to prevent livestock grazing and trampling impacts to riparian vegetation communities. Water would be made available inside fenced spring developments for wildlife use. In those areas that receive recreation use, access may be provided via a style (stairs over a fenceline) or a walk-through devise specifically designed to preclude livestock passage.
- Pipelines will be constructed to convey water from wells, springs, reservoirs, and other water sources to troughs in areas lacking adequate water to maintain appropriate animal distribution. Troughs will usually be placed in upland vegetation communities less vulnerable to livestock impacts and soil compaction. Generally, 1 to 2-inch diameter plastic pipe would be buried with a pipe-laying equipment consisting of a modified ripper tooth mounted on a tractor. Pipelines would normally be buried to a depth adequate to protect the development, though seldom deeper than 30 inches. Where obstructions prohibit pipeline burial, the pipe may be laid on the ground surface and covered with borrow soil. At times, reservoirs and other storage facilities may be constructed along pipelines. Reservoirs associated with pipelines will normally be fenced to exclude livestock, while providing water for wildlife use. In the event of equipment failure, reservoirs may provide temporary emergency water for livestock. Access points to and escape routes from water troughs will be provided for birds and small mammals.
- Fences will be designed to develop a barrier to livestock movement, while minimally impeding wildlife movement. Established standards for fence construction on BLM land would be followed (BLM Manual Handbook H-1741-1). Design features would be developed specific to each proposed fencing project to accomplish the desired objectives while avoiding undesired impacts and controversy. Surface disturbance associated with fence construction and maintenance will be minimized. Though the canopy of vegetation along fencelines may be removed and scattered, no blading or scraping would be authorized to clear routes for fence construction. All fences would be consistent with the VRM class of the area. Gates would be located and constructed at appropriate locations to provide for livestock passage. Gates, and as appropriate cattleguards, will be located at road crossings to provide vehicular passage. Gates will be constructed adjacent to all cattleguards to provide passage by equipment which cannot cross cattleguards. Recreation access would be provided where fences are necessary in the vicinity of recreation sites.

- Wildlife guzzlers would be constructed in locations with limited availability of water for wildlife use, primarily lower elevation desert habitats. They would consist of an apron designed to collect precipitation, a buried storage tank, and associated pipeline arrangement for delivery of water to a trough available to birds, small mammals, and other wildlife species. Guzzlers would normally be fenced or designed to exclude livestock access. Projects would be designed to blend with the surrounding landscape and be consistent with VRM class of the area.
- Prescribed fire, both management ignited and natural ignitions, will be designed and implemented to manage woody species dominance and to meet other land use plan objectives. Projects would be designed to direct vegetation communities toward desired future conditions and to meet management objectives for wildlife, water shed function, and other resource values. Additionally, vegetation manipulation projects would be designed to provide and maintain vegetation and structural diversity and connectivity.

Appendix T

Areas Removed from Livestock Grazing

Table T-1 is a listing of areas within the planning area from which livestock grazing has been removed by a past decision/agreement or from which removal of livestock grazing is proposed in one of the alternatives. It is included to provide a tracking of actions associated with individual parcels of land through the alternatives.

Prior to development of the Draft SEORMP/EIS, approximately 41,900 acres of public land in three blocks were set apart from grazing allotments for the specific purpose of improving or maintaining resource values that could not be protected through mitigation of livestock impacts, or were found unsuitable for livestock grazing. Land use planning action identified in various alternatives of the EIS resulted in additional areas which would be removed from livestock grazing allotments to protect public land resource values or to recognize areas which are not accessible by livestock. The size and location of areas not allocated to livestock grazing in each of the alternatives is included in the accompanying table. The approximate acreage of BLM-managed land within the planning area not allocated to livestock grazing in each of the alternatives is:

Alternative A — approximately 50,600 acres
Alternative B — approximately 41,900 acres
Alternative C — approximately 50,600 acres
Alternative D — approximately 50,600 acres
Alternative D2 — approximately 1.45 million acres
Alternative E — approximately 4.60 million acres (the entire planning area)
Proposed RMP — approximately 58,900 acres

Approximately 250 additional areas, encompassing an estimated 18,000 acres, within livestock grazing allotments are excluded from livestock by past decisions or agreements. These exclusion areas protect resource values or facilities from livestock impacts. Examples of resource values and facilities which may require livestock exclusion for protection include, but are not limited to: identified riparian vegetation communities adjacent to streams, reservoirs, springs, and wetlands; developed water sources; special status plant or animal habitats; relevant and important values for which ACEC's are designated; outstandingly remarkable values (ORV's) for which NWSR's were designated; wilderness values; research and study plots; administrative sites; recreation sites; archaeological sites; and waste disposal sites. The accompanying table lists by allotment those areas of livestock exclusion which are greater than 10 acres. This listing is not inclusive of all areas from which livestock are currently excluded. Specifically, it does not include a significant number of spring developments and other small areas from which livestock are excluded. Through the life of the RMP, adaptive management may identify additional areas which may be excluded from livestock grazing to meet management objectives. Similarly, grazing use may be restored to areas previously excluded from livestock grazing within allotments when appropriate livestock management can be implemented while protecting the values for which the area was previously excluded.

Table T-1.—*Areas within the planning area from which livestock grazing has been removed by a past decision/ agreement or from which removal of livestock grazing is proposed in one of the alternatives*

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Jordan Resource Area			
Deary Pasture [8]	Jackies Butte Summer (01101)	4,641	
Hardin Stream Exclosure [1,8]	Jackies Butte Summer (01101)	72	
Rome North Pasture [1,5,8]	Jackies Butte Summer (01101)	4,167	Owyhee NWSR
Rome South Pasture [5,6]	Jackies Butte Summer (01101)	19,713 [5] 12 [6]	Owyhee NWSR
China Gulch Seeding North [5,6]	Jackies Butte Summer (01101)	7,014 [5] 288 [6]	Owyhee NWSR
Indian Fort Pasture [5,6]	Jackies Butte Summer (01101)	58,296 [5] 1900[6]	Owyhee NWSR
Skull Creek North Pasture [5,6]	Jackies Butte Summer (01101)	2,696 [5] 311 [6]	Owyhee NWSR
Skull Creek South Pasture [5,6]	Jackies Butte Summer (01101)	1,809 [5] 311[6]	Owyhee NWSR
Sand Hollow Exclosure [8]	Jackies Butte Summer (01101)	6128	
Eastside Pasture [5,6,10]	Jackies Butte Summer (01101)	47,132 [5] 2,878[6]	Owyhee NWSR
Ambrose-Maher Pasture [5]	Ambrose-Maher (001102)	4,676[5]	Owyhee NWSR
Warm Springs Exclosure [9]	Ambrose-Maher (001102)	556	
Dry Creek Pasture [5]	15 Mile Community (01201)	3,376	Lahontan cutthroat trout
Whitehorse Pasture [5]	15 Mile Community (01201)	2,112	Lahontan cutthroat trout
Green Pond Pasture [5]	15 Mile Community (01201)	33,352	Lahontan cutthroat trout
V Pasture [5]	15 Mile Community (01201)	21,395	Lahontan cutthroat trout; sagebrush-dependent species
Luesher Pasture [4,5,6]	15 Mile Community (1201); Whitehorse Butte (01206)	3,257 [4,5] 3,084 [6]	Lahontan cutthroat trout
Indian Creek Pasture [5]	McCormick (01202)	16,827	Lahontan cutthroat trout
Dry Creek Pasture [5]	Zimmerman (01203)	7,007	Lahontan cutthroat trout: sagebrush-dependent species
Turner Pasture [5]	Zimmerman (01203)	10,139	Sagebrush-dependent species
Willow Creek Stream Exclosure #3 [1,8]	Whitehorse Butte (01206)	27	
Willow Creek Stream Exclosure #4 [1,8]	Whitehorse Butte (01206)	87	
Willow Creek Stream Exclosure #5 [1,8]	Whitehorse Butte (01206)	15	
Willow Creek Stream Exclosure #6 [1,8]	Whitehorse Butte (01206)	19	
Willow Creek Stream Exclosure #7 [1,8]	Whitehorse Butte (01206)	54	
Little Whitehorse 1972 Stream Exclosure [1,8]	Whitehorse Butte (01206)	66	
Upper Willow Creek Stream Exclosure [1,8]	Whitehorse Butte (01206)	69	

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Middle Willow Creek Stream Exclosure [1,8]	Whitehorse Butte (01206)	25	
Lower Willow Creek Stream Exclosure [1,8]	Whitehorse Butte (01206)	18	
Campground Stream Exclosure (KOA) [1,8]	Whitehorse Butte (01206)	14	
Beaverdam Stream Exclosure [1,8]	Whitehorse Butte (01206)	28	
Lower Little Whitehorse Stream Exclosure [1,8]	Whitehorse Butte (01206)	12	
Upper Little Whitehorse 1991 Stream Exclosure [1,8]	Whitehorse Butte (01206)	130	
Little Whitehorse Stream Exclosure #1 [1,8]	Whitehorse Butte (01206)	35	
Little Whitehorse Stream Exclosure #2 [1,8]	Whitehorse Butte (01206)	13	
Little Whitehorse Stream Exclosure #3 [1,8]	Whitehorse Butte (01206)	54	
Little Whitehorse Stream Exclosure #4 [1,8]	Whitehorse Butte (01206)	37	
Red Mountain North Pasture [5]	Whitehorse Butte (01206)	25,299	Lahontan cutthroat trout
Red Mountain South Pasture [5]	Whitehorse Butte (01206)	25,722	Lahontan cutthroat trout
Willow Pasture [5]	Whitehorse Butte (01206)	23,814	Lahontan cutthroat trout
15 Mile Pasture [5]	Whitehorse Butte (01206)	19,346	Lahontan cutthroat trout
West Little Owyhee Upland Exclosure [1,8]	Louse Canyon Community (01307)	>10 (estimated)	
Drummond Basin Pasture [5]	Louse Canyon Community (01307)	14,789	Owyhee NWSR
Pole Creek Seeding [5,6]	Louse Canyon Community (01307)	16,330 [5] 1,099 [6]	Owyhee NWSR
Louse Canyon [5,6]	Louse Canyon Community (01307)	87,834 [5] 828 [6]	Owyhee NWSR; redband stronghold
Anderson Crossing Exclosure [8]	Louse Canyon Community (01307)	215	
Upper West Little Owyhee Exclosure [8]	Louse Canyon Community (01307)	3,745	
West Little Owyhee Stream Exclosure [1,8]	Anderson (01401)	>10 (estimated)	
Spring Pasture [5,6]	Anderson (01401)	9,590 [5] 847 [6]	Owyhee NWSR
North Pasture [5,6]	Anderson (01401)	15,748 [5] 2,767 [6]	Owyhee NWSR
Bull Flat Pasture [5,6]	Anderson (01401)	13,981 [5] 1,022 [6]	Owyhee NWSR
Five Bar Exclosure [8]	Anderson (01401)	869	
South Tent Creek Pasture [5]	Star Valley Community (01402)	45,782	Owyhee NWSR
North Tent Creek Pasture [5,6]	Star Valley Community (01402)	35,972 [5] 703 [6]	Owyhee NWSR
North Stoney Corral [5,6]	Star Valley Community (01402)	57,915 [5] 666 [6]	Owyhee NWSR
Anderson Crossing Exclosure [8]	Star Valley Community (01402)	363	
Bowden Hills Pasture [5]	Bowden Hills (10803)	82,607	Sagebrush-dependent species
Jim Spring Exclosure [1,8]	East Cow Creek (10903)	945	
Cow Creek Upland Exclosure [1,8]	East Cow Creek (10903)	11	

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Cowgill Pasture [5]	East Cow Creek (10903)	4,629	Sagebrush-dependent species
Boulder Pasture [5]	East Cow Creek (10903)	8,024	Sagebrush-dependent species
Lava Pasture [5]	East Cow Creek (10903)	11,848	Sagebrush-dependent species
Bennett North Pasture [5]	East Cow Creek (10903)	932	Sagebrush-dependent species
Bennet South Pasture [5]	East Cow Creek (10903)	431	Sagebrush-dependent species
Bogus Creek Pasture [5, 6]	Bogus Creek (10904)	4,357 [5] 246 [6]	Owyhee NWSR
West Pasture (Jordan Craters) [2, 4, 5, 6]	Oliver (10905)	15,856	Sagebrush-dependent species
Morcom Pasture [5]	Morcom (10907)	5,843	Owyhee NWSR
Greeley Bar Exclosure [9]	Morcom (10907)	167	
Indian Canyon West Pasture [5, 6, 10]	Willow Creek (11004)	3,558 [5] 646 [6]	Owyhee NWSR
Dry Lake Pasture [5, 6]	Willow Creek (11004)	10,206 [5] 998 [6]	Owyhee NWSR
Willow Creek North Pasture [5]	Willow Creek (11004)	3,275	Sagebrush-dependent species
Willow Creek West Pasture [5]	Willow Creek (11004)	6,747	Columbia spotted frog
Mud Flat Pasture [5, 6]	Bighorn (11005)	964 [5] 269 [6]	Owyhee NWSR
West Pasture [5, 6, 10]	Bighorn (11005)	3,072 [5] 51 [6]	Owyhee NWSR
East Pasture [5, 6]	Whitehorse (11008)	14,682 [5] 450 [6]	Owyhee NWSR
West Pasture [5, 6]	Whitehorse (11008)	13,422 [5] 2,574 [6]	Owyhee NWSR
Cherry Creek Pasture [5, 6]	Danner Individual (11014)	824 [5] 214 [6]	Owyhee NWSR
Hanson Flat North Pasture [5]	Sherburn (11303)	12,691	Sagebrush-dependent species
Rattlesnake Reservoir Exclosure #2 [1, 9]	Eiguren (11305)	11	
Ho e Hill Pasture [5]	Campbell (11306)	42,987	Owyhee NWSR; redband stronghold
Lorribeu Holding Pasture [5]	Campbell (11306)	1,722	Owyhee NWSR
Sacramento Hill Pasture [5]	Campbell (11306)	19,346	Antelope Creek NWSR
Twin Spring Middle Pasture [5]	Campbell (11306)	7,154	Antelope Creek NWSR
Upper West Little Owyhee Exclosure [9]	Campbell (11306)	963	
BV Study Plot [1, 9]	Saddle Butte (20805)	>10 (estimated)	
Saddle Butte Guzzler Exclosure [1, 9]	Saddle Butte (20805)	>10 (estimated)	
Saddle Butte Pasture [5, 6]	Saddle Butte (20805)	179,823 [5] 1,859 [6]	Owyhee NWSR
Bull Creek Exclosure [9]	Saddle Butte (20805)	76	
Ryegrass Exclosure [9]	Saddle Butte (20805)	143	
Sand Spring Exclosure [9]	Saddle Butte (20805)	36	

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Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Granite Creek Exclosure [6]	Saddle Butte (20805)	4	
Fletcher Trails Exclosure [6]	Saddle Butte (20805)	227	
Lava Butte Lower Lava Field [2, 6]	West Cow Creek (20902)	14,345	
Bogus Stream Exclosure #1 (Bench) [1, 6]	West Cow Creek (20902)	13	
Bogus Stream Exclosure #2 (Falls) [1, 6]	West Cow Creek (20902)	>10 (estimated)	
Batch Lake Upland Exclosure [1, 6]	West Cow Creek (20902)	>10 (estimated)	
Bogus Lake Exclosure [1, 6]	West Cow Creek (20902)	33	
Owyhee Butte #1 Pasture [5, 6]	West Cow Creek (20902)	4,216 [a] 566 [b]	Owyhee NWSR
Owyhee Butte #3 Pasture [5, 6]	West Cow Creek (20902)	2,084 [a] 238 [b]	Owyhee NWSR
Owyhee Butte #4 Pasture [5, 6]	West Cow Creek (20902)	3,113 [a] 43 [b]	Owyhee NWSR
Navarro V Seeding [5, 6]	West Cow Creek (20902)	10,418 [a] 415 [b]	Owyhee NWSR
Riley Horn Pasture [5, 6]	West Cow Creek (20902)	12,344 [a] 968 [b]	Owyhee NWSR
Noon Reservoir Exclosure [1, 6]	Arock (21001)	16	
Little Grassy South Pasture [5, 6]	Arock (21001)	3,542 [a] 302 [b]	Owyhee NWSR
Pinto Horse Pasture [5, 6]	Arock (21001)	5,035 [a] 504 [b]	Owyhee NWSR
Field #2 [5, 6]	Arock (21001)	1,572 [a] 115 [b]	Owyhee NWSR
Field #3 [5, 6]	Arock (21001)	3,287 [a] 216 [b]	Owyhee NWSR
Field #4 [5, 6]	Arock (21001)	2,472 [a] 439 [b]	Owyhee NWSR
Field #5 [5, 6]	Arock (21001)	2,131 [a] 120 [b]	Owyhee NWSR
Round Mountain South Pasture [5, 6]	Arock (21001)	2,230 [a] 66 [b]	Owyhee NWSR
CCC (Jordan Valley) Upland Exclosure [1, 6]	Antelope (21002)	67	
Parsnip East Pasture [5]	Antelope (21002)	2,781	Sagebrush-dependent species
Parsnip West Pasture [5]	Antelope (21002)	7,142	Sagebrush-dependent species
Rattlesnake Pasture [5, 6]	Rattlesnake Individual (21003)	1,939 [a] 992 [b]	Owyhee NWSR
Deer Creek Spring [1, 6]	Gilbert (21301)	>10 (estimated)	

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Malheur Resource Area			
Malheur City Pasture[5]	Malheur City (00130)	1,167	Columbia spotted frog
Cave Creek Stream Exclosure[1,8]	Calf Creek (00162)	444	
Chukar Park Campground[1,8]	Chukar Park (00225)	>10 (estimated)	
Squaw Creek Reservoir Exclosure[1,8]	Harper (00301)	16	
Simmons Gulch Pasture[5]	Harper (00301)	25,547	ACEC; redband stronghold; sagebrush-dependent species
Sand Basin Pasture[5,6]	Turnbull (00303)	20,786[5] 882[6]	Owyhee NWSR
Moritz Pasture[1,8]	Black Butte (00304)	850	
ODFW Headquarters Stream Exclosure[1,8]	Black Butte (00304)	>10 (estimated)	
Riverside Recreation Site[1,8]	Black Butte (00304)	>10 (estimated)	
Canyon Creek Stream Exclosure[1,8]	Jonesboro (00306)	244	
Hunter Creek Riparian Exclosure[1,8]	Jonesboro (00306)	564	
Dinner Creek and Hunter Creek Riparian Pastures[5]	Jonesboro (00306)	4,228	Redband stronghold
Dunlevy-Sayer Botanical Exclosure[1,6]	North Harper (00402)	569	
Needham Well / Lincoln Bench Botanical Exclosures[1,8]	North Harper (00402)	>10 (estimated)	
Keeney Pass[1,8]	North Harper (00402)	74	
West Canal Pasture (west)[5]	North Harper (00402)	569	Special status plant ASMU
Cottonwood Wildlife Stream Exclosure[1,8]	Allotment Number Two (10201); Cottonwood Mountain (20102)	429	
Cottonwood Rehab Stream Exclosure[1,8]	Allotment Number Two (10201)	>10 (estimated)	
0201 Riparian Stream Exclosure[1,8]	Allotment Number Two (10201)	446	
South Fork Indian Creek Stream Exclosure[1,8]	Allotment Number Three (10202)	>10 (estimated)	
Allot #3 Reservoir Exclosure[1,8]	Allotment Number Three (10202)	11	
Zotto Reservoir Exclosure[1,8]	Allotment Number Three (10202)	38	
Sheep Spring Reservoir Exclosure[1,8]	Allotment Number Four (10203)	>10 (estimated)	
Chicken Creek Noodlebowl Exclosure[1,8]	Allotment Number Four (10203)	>10 (estimated)	
South C;ottonwood Reservoir Exclosure[1,8]	Allotment Number Four (10203)	24	
Coyne Riparian Stream Exclosure[1,8]	Allotment Number Four (10203)	130	
Pats Reservoir Exclosure[1,8]	Allotment Number Four (10203)	10	
Hog Creek Stream Exclosure[1,8]	Allotment Number Four (10203)	804	
Fiddleneck Botanical Exclosures 1, 2, 3, 4[1,8]	Allotment Number Four (010203)	59	
Black Canyon portion of West Miller Pasture[5]	Allotment Number Four (10203)	3,069	ACEC
East Miller Creek Pasture and Hog Creek Stream Exclosure[5]	Allotment Number Four (10203)	7,004	Redband stronghold
Hog Creek Pasture[5]	Allotment Number Four (10203)	10,404	Columbia spotted frog

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Malheur River Stream Exclosure [1, 8]	Allotment Number Six (10204)	80	
East Crow Creek Pasture [5]	Rail Canyon (10205)	4,380	Columbia spotted frog
Castle Rock Pasture [5]	Dearmond-Murphy (10206)	9,821	Castle Rock ACEC
Beulah Pasture [5]	Dearmond-Murphy (10206)	1,531	Castle Rock ACEC
Hunter Creek Pasture [5]	Dearmond-Murphy (10206)	2,092	Castle Rock ACEC
Horse Flat Reservoir Exclosure [1, 8]	Castle Rock (10211)	>10 (estimated)	
Hunter Spring [1, 8]	Castle Rock (10211)	>10 (estimated)	
North Rock Pile Pasture [5]	Castle Rock (10211)	1,267	North Fork Malheur NWSR; bull trout; Castle Rock ACEC
Castle RockPasture [5]	Castle Rock (10211)	3,940	Castle Rock ACEC
Duck Pond Pasture [5]	Castle Rock (10211)	1,451	Castle Rock ACEC
Hat Butte Pasture [5]	Castle Rock (10211)	2,115	Castle Rock ACEC
South Ridge Pasture [5]	Richie Flat (10214)	2,260	ACEC; sagebrush-dependent species
North Ridge Pasture [5]	Richie Flat (10214)	3,793	ACEC; sagebrush-dependent species
Mountain Pasture [5]	Brian Creek (10215)	2,776	Sagebrush-dependent species
East MJ Field [5]	Beulah Reservoir (10217)	249	North Fork Malheur NWSR; bull trout; ACEC
River Field [5]	Beulah Reservoir (10217)	472	North Fork Malheur NWSR; bull trout; ACEC
Mountain Pasture [5]	Buckbrush (10218)	5,103	Sagebrush-dependent species
LM Riparian Stream Exclosure [1, 8]	Malheur River (10219)	662	
North Bully Pasture [5]	Lava Ridge (10223)	2,999	ACEC; sagebrush-dependent species
Lake Ridge Pasture [5]	Red Hills (10302)	21,638	ACEC; redband stronghold; sagebrush-dependent species
Stacey Cabin and Callahan Stream Exclosures [1, 8]	Keeney Creek (10401)	44	
West Canal (west 1/2) [5]	North Harper (10402)	2,501	Special status plant ASMU
Ryefield Reservoir Exclosure [1, 8]	Nyssa (10403)	>10 (estimated)	
Mud Spring and Reservoir Exclosures [1, 8]	Nyssa (10403)	17	
Rock Creek Riparian Stream Exclosure (Lower Owyhee River) [1, 5, 8]	Nyssa (10403)	1,605	Owyhee River Below the Dam NWSR, ACEC, special status plant ASMU
Sagebrush Reservoir Exclosure [1, 8]	Nyssa (10403)	>10 (estimated)	
Double Mountain Botanical Exclosure [1, 8]	Freezeout (10404)	>10 (estimated)	
Upper Flowing Well Exclosure [1, 8]	Freezeout (10404)	>10 (estimated)	
Lower Flowing Well Exclosure [1, 8]	Freezeout (10404)	>10 (estimated)	
Twin Springs Exclosure [1, 8]	Freezeout (10404)	18	
Kane Spring Reservoir Exclosure [1, 8]	Freezeout (10404)	66	
DM Spring and Reservoir Exclosure [1, 8]	Freezeout (10404)	>10 (estimated)	

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Little DM Spring Exclosure [1,8]	Freezeout (10404)	>10 (estimated)	
South Freezeout Pasture [5]	Freezeout (10404)	12,611	Dry Creek NWSR, redband stronghold, sagebrush-dependent species
Hurley Spring Pasture [5]	Freezeout (10404)	33,075	Dry Creek NWSR, redband stronghold, sagebrush-dependent species
Willow Springs Pasture [5]	Quartz Mountain (10406)	18,095	Owyhee NWSR
Greeley Bar Exclosure [8]	Quartz Mountain (10406)	55	
Vines Hill Reservoir Exclosure [1,8]	Little Valley (10407)	18	
Brown Butte Wildlife Upland Exclosure [1,8]	Blackjack (10501)	228	
East Blackjack (north 1/ 4) [5]	Blackjack (10501)	2,679	Special status plant ASMU
Leslie Gulch [2,4,5,6]	Three Fingers (10503)	11,673	Leslie Gulch/Honeycombs Complex ACEC
Riverside Pasture [5]	Three Fingers (10503)	48,714	Leslie Gulch/Honeycombs Complex ACEC
Succor Creek Botanical Exclosure [1,8]	Three Fingers (10503)	10	
Saddle Butte Reservoir Exclosure [1,8]	Three Fingers (10503)	>10 (estimated)	
Three Fingers Reservoir Exclosure [1,8]	Three Fingers (10503)	>10 (estimated)	
Antelope Test Plot [1,8]	Three Fingers (10503)	>10 (estimated)	
Coal Mine Basin [5]	Three Fingers (10503)	755	ACEC
Blackrocks Pasture [5]	Three Fingers (10503)	10,523	Owyhee NWSR
Dog Creek Pit Exclosure [1,8]	Spring Mountain (10504)	>10 (estimated)	
Carter Wildlife Exclosure [1,8]	Spring Mountain (10504)	>10 (estimated)	
Mahogany Test Plot [1,8]	Spring Mountain (10504)	>10 (estimated)	
Shalerock Pasture [5]	Spring Mountain (10504)	5,174	Redband stronghold
Bench Reservoir Exclosure [1,8]	McCain Spring (10505)	>10 (estimated)	
Blowout Reservoir Exclosure [1,8]	McCain Spring (10505)	>10 (estimated)	
Historic Birch Creek Ranch [1,5]	Birch Creek (10506)	106	Owyhee NWSR
Island Field [5]	Birch Creek (10506)	1,808	Owyhee NWSR
Birch Creek Pasture [5]	Birch Creek (10506)	2,633	Owyhee NWSR
Alkali Experimental Plots 1 & 2 [1,8]	Board Corral (10507)	>10 (estimated)	
Antelope Springs Habitat Exclosure [1,8]	Board Corral (10507)	18	
Owyhee Reservoir State Park [4,5,6]	Board Corrals (10507)	832	
Alkali Springs Exclosure [1,8]	South Alkali (20100)	>10 (estimated)	

Area	Allotment	BLM acres	Alternative D2 livestock exclusion rationale
Alkali Test Plots 3, 4, and 5 [1,9]	South Alkali (20100)	>10 (estimated)	
Alkali Botanical Exclosures (burn and no burn) [1,9]	South Alkali (20100)	>10 (estimated)	
Henry Gulch Stream Exclosure [1,9]	South Alkali (20100)	>10 (estimated)	
Sandhills East Pasture [5]	South Alkali (20100)	3,858	ACEC
Dry Gulch Stream Exclosure [1,9]	Alkali Spring (20101)	10	
Birch Creek O.T. Exclosure [1,9]	Alkali Spring (20101)	>10 (estimated)	
Cottonwood Mountain Upland Exclosures 1, 2, and 3 [1,9]	Cottonwood Mountain (20102)	>10 (estimated)	
Morrison Reservoir Exclosure [1,9]	Cottonwood Mountain (20102)	>10 (estimated)	
Hope Butte Pit Exclosure [1,9]	Cottonwood Mountain (20102)	>10 (estimated)	
Poison Creek Reservoir Exclosure [1,9]	Cottonwood Mountain (20102)	>10 (estimated)	
Poall Creek Riparian Exclosure [1,9]	Poall Creek (20103)	30	
Willow Creek Upland Exclosure [1,9]	Willow Creek Livestock (20105)	20	
Brogan Research Exclosure [1,9]	Brogan Canyon (20148)	>10 (estimated)	
Mitchell Butte Dump Exclosure [1,9]		>10 (estimated)	

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[1] Area from which livestock grazing is excluded in the current situation by past decision or agreement, though remains a portion of a grazing allotment.

[2] Areas not allocated to livestock grazing in the current situation.

[3] Area proposed as not allocated to livestock grazing with implementation of Alternative C, D, or Proposed RMP; this area may be grazed only on a temporary basis for administrative and/or interpretive purposes.

[4] Areas proposed as not allocated to livestock grazing and removed from all grazing allotments with implementation of Alternatives A, C, or D.

[5] Areas proposed as not allocated to livestock grazing and removed from all grazing allotments with implementation of Alternative D2.

[6] Areas proposed as not allocated to livestock grazing and removed from all grazing allotments with implementation of the Proposed RMP.

[7] Area previously closed to livestock grazing though opened to livestock grazing with implementation of the Proposed RMP.

[8] Area from which livestock grazing is excluded though remain a portion of a grazing allotment with implementation of the Proposed RMP.

[9] Areas from which livestock grazing is excluded as a result of the April 28, 2000, modified order of the United States District Court of the District of Oregon (Civil No. CV 98-97-RE) pertaining to livestock management within areas of concern identified by the Bureau in the 1993 "Owyhee National Wild and Scenic River Plan." Acreage affected was identified in the fourth and fifth declaration of Jerry L. Taylor which are cited in the modified order. Terms of exclusion of livestock from these areas and acreage affected is subject to jurisdiction by the Court pending completion of the EIS and/or resolution of appeals.

[10] Includes a portion of the 4,641-acre "Deary Pasture" proposed as not allocated to livestock grazing and removed from all grazing allotments with implementation of the Proposed RMP.

Appendix U

Potential Recreation Sites, Trails, and Improvements of Existing Sites

Opportunities that could enhance recreational opportunities or protect resources from recreation-related activities have been identified through existing planning decisions, visitor data collection, and inventories. In support of these opportunities, the following is a list of potential new recreation sites and trails, and improvements of existing sites within each resource area. This list is not intended to be inclusive of sites and possible improvements. Prior to establishment, sites and improvements would be reviewed by an interdisciplinary team to ensure compliance with management objectives.

Table U-1.—*Potential recreation sites, trails, and improvements of existing sites*

Site	Location	Affected alternative	Potential improvements [1]
Jordan Resource Area			
Wes Hawkins Trailhead	T34S, R45E, Sec 22	A, C, D, D2, E, PRMP	Trailhead for hiking into Owyhee Canyon.
Deary Pasture Trailhead	T33S, R44E, Sec 34	A, C, D, D2, E, PRMP	Trailhead for hiking into Owyhee Canyon
Willow Creek Hot Springs	T38S, R38E, Sec 16	A, B, C, D, D2, PRMP	Enhance interpretation.
Cow Lakes	T28S, R44E, Sec 27,28	A, B, C, D, D2, PRMP	Improve camping sites and boat ramp; enhance waterfowl habitat and viewing opportunities, incorporate Watchable Wildlife program; add interpretation. Hiki ng trailhead at/near Parks Dam.
Petrified Wood Area		A, C, PRMP	2Signs; interpretation/information.
Mud Springs, Cottonwood Creek, Oregon Canyon, Minehole Creek	T38S, R40E, Sec 28 T40S, R41E, Sec 6 T40S, R40E, Sec 10 T39S, R40E, Sec 27	A, B, C, D, D2, PRMP	Signs, interpretation/information.
Trout Creek Access Road	(see description)	A, C, D, D2	Potential national backcountry byway, signs, interpretation.
Coffee Pot Crater	T28S, R43E, Sec 9	A, PRMP	Parking barriers, interpretation, trailhead.
Three Forks	T34S, R45E, Sec 35	A, B, C, D, D2, E, PRMP	Camping sites' amenities.
Owyhee Overlook	T33S, R44E, Sec 12	A, B, C, D, D2, E, PRMP	Parking, interpretation.
Hole-In-The-Ground	T27S, R42E, Sec 20	A, B, C, D, D2, E, PRMP	Interpretation.
Birch Creek Historic Ranch	T27S, R43E, Sec 18	A B, C, D, D2, E, PRMP	Camping site amenities, restroom, interpretation.
Anderson Crossing	T40S, R46E, Sec 3	A,B,C,D,D2,E,PRMP	Signs, interpretation.
Jeff Reservoir	T40S, R46E, Sec 7	A,B	Signs, interpretation
Soldier Creek Watchable Wildlife Loop	(see description)	B,C,D,D2,PRMP	Signs, Interpretation.
McDermitt Caldera Campground	T41S, R40E	A	Day and overnight site at south end of Trout Creek-Oregon Canyon SRMA.
Antelope Reservoir	T30S, R45E, Sec 32 T31S, R45E, Sec 5,6,7, 18	A,B,C,D,D2,PRMP	Develop nonmotorized trail system; incorporate Watchable Wildlife program; add interpretation.
Rome	T31S, R42E, Sec 30	A,B,C,D,D2,E,PRMP	Improve campground; develop permanent ranger station; improve interpretation.
Highway 95 Interpretive Site	T30S, R44E, Sec 36	A,B,C,D,D2,PRMP	Install toilet and picnic facilities for day use only. Improve "Taylor Grazing" interpretive sign.
Owyhee Spring	T32S, R42E, Sec 6	A,B	Improve for day and overnight use; add interpretation.
Malheur Resource Area			
Horseshoe Bend	T21, R38E, Sec 3,10	A,C,D,D2,PRMP	River setting for day and overnight use along U.S. Hwy 20.
Coyne Place	T20S, R40E, Sec 33 T21S, R40E, Sec 4	A,PRMP	River setting for day and overnight use along U.S. Hwy 20, exclosure.
Big Bend	T21S, R46E, Sec 27	A	Snake River boat access, day use.

Site	Location	Affected alternative	Potential improvements [1]
Hunter Spring	T18S, R37E, Sec 15	A,B,C,D,D2,PRMP	Day/overnight site with trailhead for Castle Rock.
Riverside	T23S, R37E, Sec 22	A,B,C,D,D2,PRMP	Day/overnight site with trailhead and boat access.
Snake River	T18S, R47E, Sec 27	A,C,D,D2,PRMP	Boat access, day use. Watchable Wildlife interpretation.
Desert Trail trailheads, safety.	(see Map REC-1 in the Draft SEORMP/EIS)	A,B,C,D,D2,PRMP	Corridor point-to-point trail between Route 78 and near Stinkingwater Pass: signs, information, site-specific trail tread if needed for resource protection/public
Malheur River Trail	(see description)	A,C,PRMP	Nonmotorized trail along abandoned railroad grade on Malheur River between Riverside, Oregon, and near Juntura, Oregon, with trail heads.
Owyhee Breaks Trail	(see description)	A,C,D,D2,PRMP	Nonmotorized point-to-point trail between Owyhee Reservoir State Park and Birch Creek Historic Ranch.
Lower Owyhee Trail	(see description)	A,C,D,D2,PRMP	Developed trail along Owyhee River below the Dam between Lower Owyhee Canyon Watchable Wildlife site and BOR Government Camp (varying length by alternative).
Castle Rock Trail Castle	(see description)	A,C,PRMP	Developed trail from Castle Rock and Hunter Spring Recreation Sites, to include Rock.
Lower Owyhee Canyon	(undetermined)	A,C,PRMP	Day/overnight use site on Owyhee River Below the Dam.
Twin Springs	T22S, R43E, Sec 35	A,B,C,D,D2,PRMP	Enlarge existing site, provide for day/overnight facilities, improve water system, reroute road.
Chukar Park	T20S, R37E, Sec 27	A,B,C,D,D2,PRMP	Improve site for host and group camping, water systems, sanitation facility, day/overnight facilities.
Oasis	T15S, R46E, Sec 18	A,B,C,D,D2,PRMP	Improve site: boat ramp/dock, expanded parking, picnic/camping sites, interpret Watchable Wildlife.
Snively Hot Springs	T21S, R45E, Sec 22	A,B,C,D,D2,PRMP	Improve/provide site's day/overnight facilities, water system, parking, interpretation, exclosure, and trailhead.
Lower Owyhee River Watchable Wildlife Corridor	T21S, R45E, Sec 14	A,B,C,D,D2,PRMP	Enhance area with additional interpretation, exclosure, and trailhead, satellite interpretive/viewing points.
Castle Rock	T17S, R37E, Sec 28	A,B,C,D,D2,PRMP	Improve site with exclosure, day/overnight facilities, trailhead.
Slocum Creek/Leslie Gulch	Leslie Gulch ACEC	A,B,C,D,D2,PRMP	Per approved LGMP: Improve with day/overnight facilities, satellite trailheads/parking, interpretation/information.
Alkali Springs-Oregon Trail	T17S, R45E, Sec 5	A,B,C,D,D2,E,PRMP	Improve parking.
Birch Creek-Oregon Trail	T15S, R45E, Sec 9	A,B,C,D,D2,E,PRMP	Improve parking.
Keeney Pass-Oregon Trail	T19S, R45E, Sec 23	A,B,C,D,D2,E,PRMP	Improve parking.

[1] Level of development/improvement usually varies with alternative.

Appendix V

Study River Rationale for Table 4-3

Table V-1.—*Rationale supporting the possible changes in wild and scenic study river outstandingly remarkable values conditions found in Table 4-3*

River	Alternative	Rationale for condition change
Malheur Resource Area		
Cottonwood, M1[1]	A–D2, PRMP	Fish value would receive protection by riparian management and by VRM classification.
	E	Fish benefit by elimination of livestock grazing and associated impacts on fishery habitat.
Black Canyon, M6	A, C, D, D2, PRMP	Botanic value would benefit from ACEC management prescriptions.
	B	Botanic values are protected under current management.
	E	Botanic values could benefit from elimination of livestock grazing and associated impacts.
SF Indian, M8	A, B, E	Scenic values are protected by management prescriptions.
	C, D, D2, PRMP	An increase in the protection of the scenic value would occur by the change to VRM Class II.
Canyon, M9	A	Fish values could be adversely impacted in the short term by any increases in livestock grazing.
	B	Fish values could be adversely impacted in the short term by existing livestock grazing outside of the exclosure.
	C, D, D2, PRMP	Increased emphasis on implementation of riparian management would help to protect the fish value.
	E	Fish benefit by elimination of livestock grazing and associated impacts on fishery habitat.
Malheur, M12	A	Recreation values could be adversely impacted in the short term by any increases in livestock grazing. Wildlife values would be maintained under current management prescriptions.
	B	Recreation and wildlife values would be maintained under current management prescriptions.
	C, D, D2, PRMP	Increased emphasis on implementation of riparian management would protect the recreation value. Wildlife values would be maintained under management prescriptions.
	E	Recreation and wildlife values could benefit by elimination of livestock grazing and associated impacts.
SF Carter, M14	A–PRMP	Protection of fish values would be maintained by meeting existing riparian management objectives.
Dry, M15	A, B	ORV's outside of the WSA could be subject to adverse impacts from activities associated with mining and from site-specific increases in livestock grazing until appropriate management is implemented. ORV's within the WSA portion of the stream segment would receive protection under VRM classification.
	C, D, D2, PRMP	ORV's would be protected and enhanced under ACEC management prescriptions.
	E	Fish and wildlife values would be enhanced by eliminating livestock use.

River	Alternative	Rationale for condition change
Owyhee, M16	A	Scenic values could be adversely affected by realty actions (utility corridor developments), and in the short term, by any new surface-disturbing activities associated with mining. Fish values could be adversely impacted by increased angling in short term until appropriate management is implemented. The other ORV's would receive negligible impacts.
	B	Scenic values could be adversely affected by realty actions (utility corridor developments), and in the short term, by any new surface-disturbing activities associated with mining. The other ORV's would receive negligible impacts.
	C, D, D2, PRMP	Scenic, recreation, wildlife, and botanic values would be protected and enhanced by ACEC and/or SRMA management prescriptions. The other ORV's would receive negligible impacts.
	E	Scenic, wildlife, and botanic values would be protected and enhanced by ACEC management prescriptions. The other ORV's would receive negligible impacts.
NF Malheur, M17	A, C, D, D2, PRMP	Scenic, fish and wildlife values would be protected and enhanced by ACEC management prescriptions. Recreation value would be maintained.
	B	Scenic, recreation, fish, and wildlife values would be protected under current management.
	E	Scenic, fish and wildlife values would be enhanced by eliminating livestock grazing. Recreation values would be maintained.
Jordan Resource Area		
Whitehorse, J1	A, B, C, PRMP	Scenic value would receive protection under VRM classification. Threatened and endangered (T&E) fish value would be protected by ESA, and existing riparian management.
	D, D2	An increase in the protection of the scenic value would occur by the change to VRM Class I. T&E fish value would be protected by ESA, and existing riparian management.
	E	An increase in the protection of the scenic value would occur by the change to VRM Class I. T&E fish value would be protected by ESA.
Doolittle, J2	A-PRMP	Across all alternatives the T&E fish value would be protected by ESA and existing riparian management, and there would be no or negligible effects to the prehistoric cultural value.
Little Whitehorse, J4	A-PRMP	Across all alternatives the T&E fish value would be protected by ESA, and existing riparian management.
Cottonwood, J5	A-PRMP	Across all alternatives the T&E fish value would be protected by ESA, and existing riparian management.
Willow, J6	A, C, D, D2, PRMP	The recreation, prehistoric, historic, and botanic values would be benefit from the proposed SRMA, OHV use limitations, and VRM Class II. T&E fish value would be protected by ESA, and existing riparian management.
	B	T&E fish value would be protected by ESA, and existing riparian management.
	E	Fish, cultural, botanic, and recreation values could be adversely impacted by unmanaged recreation.
McDermitt, J7	A, B, C, PRMP	All of the corridor would be VRM Class II which would help protect the scenic value.
	D, D2	An increase in the protection of the scenic value could occur by the change to VRM Class I of the WSA portion of the corridor. The remainder of the corridor would be VRM class II.
	E	An increase in the protection of the scenic value could occur by the change to VRM Class I of the WSA portion of the corridor. The remainder of the corridor would not be classified.

River	Alternative	Rationale for condition change
NF McDermitt, J8	A, B, C, PRMP	No change. All of the corridor would be VRM Class II which would help protect the scenic value.
	D, D2, E	An increase in the protection of the scenic value could occur by the change to VRM Class I.
Sage, J9	A-PRMP	Across all alternatives the T&E fish value would be protected by ESA, and existing riparian management.
Antelope, J10	A-PRMP	Across all alternatives the T&E fish value would be protected by ESA, and existing riparian management.
Indian, J14	A-PRMP	Across all alternatives the T&E fish value would be protected by ESA, and existing riparian management.
Oregon Canyon, J15	A, C, PRMP	Scenic value would be protected by WSA status which eliminates most surface disturbing activities. Recreation value would benefit from the proposed SRMA.
	B	Scenic value would be protected by WSA status which eliminates most surface disturbing activities.
	D, D2	An increase in the protection of the scenic value would occur by the change to VRM Class I. Recreation value would benefit from the proposed SRMA.
	E	An increase in the protection of the scenic value would occur by the change to VRM Class I.
Rattlesnake, J17	A	Recreation value may benefit from proposed bighorn sheep management (such as increased releases may lead to more hunting opportunities). The recreation value could be adversely impacted by any increase in livestock grazing.
	B	No change.
	C, D, D2, E	Recreation value would benefit from proposed bighorn sheep management (such as increased releases may lead to more hunting opportunities).
Antelope, J19	A, C, D, D2, PRMP	Scenic value would receive protection under VRM classification. Recreation value would benefit from proposed bighorn sheep management (such as increased releases may lead to more hunting opportunities).
	B	Scenic value would receive protection under VRM classification.
	D, D2, E	An increase in the protection of the scenic value would occur by the change to VRM Class I. Recreation value would benefit from proposed bighorn sheep management (such as increased releases may lead to more hunting opportunities).

[1] "M" and "J" numbers are inventory numbers.

Appendix W

Monitoring

Reader note: *This appendix was developed in response to public comments. In general, the reader will be able to see the type of monitoring techniques or procedures that would be applied for each objective in Chapter 3. Each resource area will develop a monitoring strategy based on the GMA priority areas during the plan implementation process.*

Table W-1.—*Southeastern Oregon Resource Management Plan monitoring by objective*

Monitoring for:	Monitoring method
AIR RESOURCES *Objective: Meet or exceed the "National Ambient Air Quality Standards" and the "Prevention of Significant Deterioration" with all authorized actions.*	
Tons of burnable fuel, live moisture, and estimated fire behavior to predict probable smoke emissions.	• Preburn fuels assessment
Air quality and particulate emissions from prescribed fire or other management actions.	• Onsite/regional monitoring equipment
Smoke dispersal, time of dispersal, path/location of dispersal, and impacts to Class I and II air-sheds; public health concerns.	• Visual ground and air observations
Compliance with Air Resources objective above.	• Field review of project implementation (Burn Boss report)
ENERGY AND MINERAL RESOURCES *Objective 1: Provide opportunities for exploration and development of leasable energy and mineral resources while protecting other sensitive resources.*	
Compliance with applicable laws, regulations, conditions of leases, and the requirements of approved exploration/development plans. On producing leases, ensures an accurate accounting of materials removed, protection of the environment, public health and safety, and identification and resolution of mineral trespass.	• Field inspection of leasable mineral activities • Applicable resource attribute sampling
Objective 2: Provide opportunities for exploration and development of locatable mineral resources while protecting other sensitive resources.	
Compliance with regulations and conditions of approval, especially the prevention of unnecessary or undue of disturbed areas in coordination with State agencies.	• Field inspection of mining claim activities • Vegetation and soil attribute sampling in accordance with Solid Minerals degradation of the public lands, and ensuring reclamation Reclamation Handbook H-3042-1
Objective 3: Provide for public demand for saleable minerals from public land while protecting sensitive resources.	
Compliance with applicable laws, regulations, and the requirements of approved mining plans. On producing operations, to ensure an accurate accounting of material removed, reclamation, protection of the environment, public health and safety, and identification and resolution of saleable mineral trespass.	• Field inspection of designated community pits, common use areas, and other saleable mineral extraction operations • Applicable resource attribute sampling

Monitoring for:	Monitoring method
FIRE	
Objective 1:** **Provide an appropriate management response (AMR) on all wildfires, with emphasis on minimizing suppression costs, considering fire fighter and public safety, benefits, and values to be protected consistent with resource objectives.	
Fuel moisture for projecting probable fire behavior prior to fire ignition	• Live fuel moisture sampling
Fire history/regime for Phase 1 and future fire planning.	• Data recovery/mapping of fire size and location, weather (storm patterns), acres burned, suppression costs, and resources value loss
Smoke emissions for public health concerns and future smoke projections.	• Visual, modeled, and/or measured assessments
Validation of predicted fire behavior; effectiveness in meeting goals/objectives in minimizing suppression costs, fire fighter and public safety.	• Real-time fire behavior observation
Fire effects on biological and physical resources.	• Samle/collect data on plant mortality, impacts to soil microflora and microfauna, nutrient cycle, regeneration, erosion, and water quality.
Weather for projecting fire behavior.	• Remote automated weather stations (RAWS) and manual stations
Objective 2:** **Recognize fire as a critical natural process and use it to protect, maintain, and enhance resources.	
Provide baseline and reference for short- and long-term fire effects monitoring.	• Control or reference plots (untreated areas), line transects, etc.
Visual fuels inventory: reference pre- and post-burn meeting of resource and fire objectives.	• Photo series
Predict first order (immediate) fire effects on abiotic (individual organism or community), fuel consumption, thermal environment, smoke emissions, chemical releases, nutrient conversion, plants/animals altered, injured, or lost.	• Pre-burn fire effects modeling
Tracking of real time weather and fuel conditions on-site or immediately adjacent to treatment site assists with prediction of fire behavior, which in turn affects the meeting of objectives and the identification of concerns/issues addressing fire fighter and public safety.	• Pre-burn monitoring of weather and fuel conditions
Measurement of overall project effect (meeting of objectives) by identifying plant mortality, impacts to soils, nutrient status, regeneration, key plant/animal species disturbance, and erosion.	• Post burn monitoring (short/long term)
Accurate tracking of acreage treated and/or burned; results will aid in assessing impacts on a landscape or watershed basis in addition to achieving identified resources and fire management objectives as they relate to individual projects.	• Mapping (GPS/GIS)

Monitoring for:	Monitoring method

RANGELAND VEGETATION

Objective 1: Restore, protect, and enhance the diversity and distribution of desirable vegetation communities, including perennial native and desirable introduced plant species. Provide for their continued existence and normal function in nutrient, water, and energy cycles.

Identification of ecological sites and determination of ecological status, soils and vegetation mapping	•Procedures in accordance with (1) BLM Manual 4410: Ecological Site Inventory, and (2) BLM Technical Reference 4400-5: Rangeland Inventory & Monitoring Supplemental Studies
Determination of trends in production, structure, and composition of vegetation.	•Vegetation attribute sampling in accordance with (1) Sampling Vegetation Attributes, Interagency Technical Reference 1996, and (2) BLM Technical Reference 4400-5: Rangeland Inventory & Monitoring Supplemental Studies
Determination of soil/site stability, watershed function, and integrity of the biotic community.	• Standards of rangeland health assessments: Interpreting Indicators of Rangeland Health, BLM Draft Technical Reference, 1999
Measurement of utilization (livestock, wild horses, and wildlife) and calculation of forage production.	• Grazing utilization in accordance with Utilization Studies and Residual Measurements, Interagency Technical Reference 1996
Recording of annual, seasonal, and crop year precipitation.	• Climatic conditions: NOAA climatological data and BLM RAWS data

Objective 2: Manage big sagebrush cover in seedings and on native rangeland to meet the life history requirements of sagebrush-dependent wildlife.

Identification of ecological sites and determination of ecological status; soils and vegetation mapping.	• Inventory: Ecological site inventory (1) BLM Manual 4410: Ecological Site Inventory, and (2) BLM Technical Reference 4400-5: Rangeland Inventory & Monitoring Supplemental Studies
Recording of vegetation frequency, cover, density, production, structure, and composition.	• Trend: Vegetation attribute sampling in accordance with (1) Sampling Vegetation Attributes, Interagency Technical Reference 1996, and (2) BLM Technical Reference 4400-5: Rangeland Inventory & Monitoring Supplemental Studies

Objective 3: Control the introduction and proliferation of noxious weed species and reduce the extent and density of established weed species to within acceptable limits.

Recording of noxious weed presence, distribution, and density	• Periodic ocular surveillance

FOREST AND WOODLANDS

Objective 1: Manage forests to maintain or restore ecosystems to a condition in which biodiversity is preserved and occurrences of fire, insects, and disease do not exceed levels normally expected in a healthy forest. Increase the dominance of ponderosa pine, Douglas fir, and western larch on appropriate sites in mature forests. Decrease the amount of Douglas fir, white fir, and grand fir where they were not historically maintained by the dominant fire regime. Manage forests for long-term, healthy habitat for animal and plant species. Provide for timber production where feasible and compatible with forest health.

Disturbances, trends in spatial distribution and stand types.	• Aerial photography, photo points, and periodic ocular surveys
Forest health	• Physical and biotic attribute sampling including classification of age and size structure, density, cover, production; measurements for severity and extent of disease and/or insect infestations

Monitoring for:	Monitoring method

Objective 2: Restore productivity and biodiversity in juniper and quaking aspen woodland areas. Manage juniper areas where encroachment or increased density is threatening other resource values. Retain old growth characteristics in historic juniper sites not prone to frequent fire. Manage quaking aspen to maintain diversity of age classes and to allow for species reestablishment.

Disturbances, composition, and trends in spatial distribution	• Aerial photography, photo points, and periodic ocular surveys
Trends in vegetation age and size class structure, density, cover, and reproduction attributes.	• Vegetative attribute sampling
Season and amount of plant material removed	• Utilization studies

SPECIAL STATUS PLANT SPECIES

Objective: Manage public land to maintain, restore, or enhance populations and habitats of special status plant species. Priority for the application of management actions would be: (1) Federal endangered species, (2) Federal threatened species, (3) Federal proposed species, (4) Federal candidate species, (5) State listed species, (6) BLM sensitive species, (7) BLM assessment species, and (8) BLM tracking species. Manage in order to conserve or lead to the recovery of threatened or endangered species.

Composition; invasion of exotic species; localized disturbances; trends in special status plant attributes.	• Photo points and periodic ocular surveillance
Season and amount of plant material removed.	• Utilization studies
Trends in special status plants and vegetation including demographic studies, density, cover, frequency	• Vegetative attribute sampling in accordance with Measuring & Monitoring Plant Populations, BLM Technical Reference 1730-1

WATER RESOURCES AND RIPARIAN/WETLAND AREAS

Objective 1: Ensure that surface water and groundwater influenced by BLM activities comply with or are making progress toward achieving State of Oregon water quality standards for beneficial uses as established per stream by the Oregon Department of Environmental Quality (ODEQ).

State water quality standards	• EPA-approved methodologies
Stream flows (peak, low, annual)	• Staff gages, remote gaging stations, flow measurements.
Channel geometry and evolution	• Stream Cross Sections TR-4341-1 & TN-387; stream channel stability and condition assessments, Rosgen Stream Type Classification

Objective 2: Restore, maintain, or improve riparian vegetation, habitat diversity, and associated watershed function to achieve healthy and productive riparian areas and wetlands.

Condition and functionality of riparian/wetland areas	• Proper Functioning Condition TR 1737-9 and Assessment for Lotic and Lentic Riparian/Wetland Areas TR 1737-11
Riparian/wetland attributes	• Low level aerial photography, photo points, line transects, Cole Browse
Season and amount of plant material removed/remaining	• Cole Browse, herbaceous stubble height, utilization
Determination of ecological status	• Ecological Site Inventory/Riparian/Wetland Sites TR 1737-7

Monitoring for:	Monitoring method
FISH AND AQUATIC HABITAT *Objective: Restore, maintain, or improve habitat to provide for diverse and self-sustaining communities of fishes and other aquatic organisms.*	
Location, distribution, movement, or numbers of aquatic species, especially fishes	• Population surveys (such as snorkling, electrofishing, redd counts, trap netting); benthic macroinvertebrate sampling (per BLM's aquatic ecosystem laboratory method)
Stream geomorphology and aquatic habitat	• Stream habitat surveys (such as ODFW Aquatic Habitat Inventory Method), water quality measurements, riparian/wetland condition and functionality assessments.
WILDLIFE AND WILDLIFE HABITAT *Objective 1: Maintain, restore, or enhance riparian areas and wetlands so they provide diverse and healthy habitat conditions for wildlife.*	
Habitat Conditions	• See Water Resources and Riparian/Wetland section
Objective 2: Manage upland habitats in forest, woodland, and rangeland vegetation types so that the forage, water, cover, structure, and security necessary for wildlife are available on the public land.	
Characteristics of woody plant species in terms of age, growth form, and current year incidence of use by grazing animals.	• Cole Browse
Canopy cover characteristics of vegetation	• Line intercept canopy cover, Daubenmire plots
Plant community distribution and appearance	• Remote sensing imagery, photo points
Location, distribution, movement, or numbers of animals	• Population surveys (such as breeding bird point counts)
Habitat conditions	See Forest and Woodlands and Rangeland Vegetation sections
SPECIAL STATUS ANIMAL SPECIES *Objective 1: Manage public land to maintain, restore, or enhance populations and habitats of special status animal species. Priority for the application of management actions would be: (1) Federal endangered species, (2) Federal threatened species, (3) Federal proposed species, (4) Federal candidate species, (5) State listed species, (6) BLM sensitive species, (7) BLM assessment species, and (8) BLM tracking species. Manage in order to conserve or lead to the recovery of threatened or endangered species.*	
Species distribution and habitat conditions	• See Wildlife and Wildlife Habitat and Fish and Aquatic Habitat sections
Objective 2: Facilitate the maintenance, restoration, and enhancement of bighorn sheep populations and habitat on public land. Pursue management in accordance with the 1997 "Oregon's Bighorn Sheep Management Plan" (OBSMP) in a manner consistent with the principles of multiple use management.	
Location, distribution, movement, or numbers of animals	• Population surveys (primarily conducted by ODFW)
Habitat conditions	• See Rangeland Vegetation section

Monitoring for:	Monitoring method

WILD HORSES

Objective: Maintain and manage wild horse herds in established herd management areas (HMA's) at appropriate management levels (AML's) to ensure a thriving, natural ecological balance between wild horse populations, wildlife, livestock, vegetation resources, and other resource values. Enhance and perpetuate special and unique characteristics that distinguish the respective herds.

Recording of reproductive success and population growth as it relates to established AML's	• Aerial and/or ground horse counts
Determination of wild horse grazing use	• Grazing actual use/utilization in accordance with Utilization Studies and Residual Measurements, Interagency Technical Reference 1996; utilization pattern mapping
Recording of physical and biotic attributes, trends	• See Rangeland Vegetation, Special Status Plants and Animals, Water Resources and Riparian/Wetland Areas sections

RANGELAND/GRAZING USE

Objective: Provide for a sustained level of livestock grazing consistent with other resource objectives and public land use allocations.

Compliance with permitted use.	• Livestock use supervision, ocular surveillance
Determination of livestock grazing use	• Grazing actual use / utilization in accordance with Utilization Studies and Residual Measurements, Interagency Technical Reference 1996; utilization pattern mapping
Recording of physical and biotic attributes, trends	• See Rangeland Vegetation, Special Status Plants and Animals, Water Resources and Riparian/Wetland Areas sections

RECREATION

Objective: Provide and enhance developed and undeveloped recreation opportunities, while protecting resources, to manage the increasing demand for resource-dependent recreation activities.

Visitation levels; trends and variances.	• Traffic counters, site registrations, and periodic surveillance at recreation use locations
Compliance with recreation site rules / permit	• Review of recreation permits and site registrations (such as trailhead and stipulations; identification of users needs and trends campground registers)
Conditions of resources	• See Rangeland Vegetation, Special Status Plant Species, Water Resources and Riparian/Wetland Areas; ocular surveillance of recreation activities in WSA's and other SMA's
Dispersed/backcountry recreation use	• Backcountry campsite and uses surveys, limits of acceptable change, photo points, user contacts
Visitor experience/satisfaction	• User contacts

OFF-HIGHWAY VEHICLES

Objective: Manage off-highway vehicle (OHV) use to protect resource values, promote public safety, provide OHV use opportunities where appropriate, and minimize conflicts among various users.

Conditions of resources	• See Rangeland Vegetation, Special Status Plant Species, Water Resources and Riparian/Wetland Areas; ocular surveillance
OHV activities; compliance with designations	• Permit review; ocular surveillance; user contacts

Monitoring for: **Monitoring method**

VISUAL RESOURCES

Objective: Manage public land actions and activities in a manner to be consistent with visual resource management (VRM) class objectives.

Compliance with VRM management classes	• Project review; visual contrast ratings; ocular surveillance

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Objective: Retain existing and designate new areas of critical environmental concern (ACEC's)/ research natural areas (RNA's) where relevance and importance criteria are met and special management is required to protect the values identified.

Disturbances, site conditions contacts/compliance	• Aerial photography, photo points, periodic ocular surveillance, user
Physical and biotic attributes, trends	• See Rangeland Vegetation, Special Status Plants and Animals, Visual Resources, Water Resources and Riparian/Wetland Areas sections

WILD AND SCENIC RIVERS

Objective: Protect and enhance outstandingly remarkable values (ORV's) of designated national wild and scenic rivers (NWSR's), and provide interim protection of ORV's of rivers found suitable for inclusion in the national wild and scenic river system (NWSRS) until Congress acts.

Disturbances, site conditions; use levels and trends	• Aerial photography, photo points, periodic ocular surveillance, user contacts/compliance, permit review
Physical, biotic and cultural resource attributes, trends	• See Cultural Resources, Rangeland Vegetation, Special Status Plants and Animals, Visual Resources, Water Resources and Riparian/Wetland Areas

HUMAN USES AND VALUES

Objective: Manage public land and pursue partnerships to provide social and economic benefits to local residents, businesses, visitors, and future generations.

Trends in future demand for resources and resource values indicators	• Track locally and regionally generated economic and demographic
Measurement of partnership benefits	• Periodic tally of financial and in-kind contributions

CULTURAL RESOURCES

Objective 1: Protect and conserve cultural and paleontological resources.

Illegal site excavation and vandalism	• Photo points, periodic ocular surveillance, field inspection; public contact

Objective 2: Increase the public's knowledge of, appreciation for, and sensitivity to cultural and paleontological resources.

Visitor experience, satisfaction	• Participate in local, community events; develop informational brochures;
Measurement of partnership benefits	• Periodic tally of financial and in-kind contributions

Objective 3: Consult and coordinate with American Indian groups to ensure their interests are considered and their traditional religious sites, landforms, and resources are taken into account.

Traditional religious sites, landforms and resources	• Visitation with Tribal leaders and staff; develop activity plans
Protection and management of identified traditional use areas	• Field inspection; periodic contact with Tribal staff

Monitoring for:	Monitoring method
LAND AND REALTY	
Objective 1: Retain public land with high and public resource values. Consolidate public landholdings and acquire land or interests in land with high public resource values to ensure effective administration and improve resource management. Acquired land would be managed for the purposes for which it was acquired. Make available for disposal approximately 62,100 acres of public land within Zone 3 by State indemnity selection, private or State exchange, "Recreation and Public Purpose Act" (R&PP) lease or sale, public sale, or other authorized method (see Appendix L).	
Progress of land tenure adjustments	• BLM accomplishment and plan implementation tracking processes
Objective 2: Establish right-of-way corridor routes to the extent possible, taking into account avoidance areas, consistent with resource objectives.	
Compliance with rights of way designations and authorizations.	• Authorization review; ocular surveillance; user contacts

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